
Alaskan Copper Works

STORMWATER POLLUTION PREVENTION PLAN – ALASKAN COPPER WORKS SEATTLE FACILITY 3405 6TH AVE SOUTH, SEATTLE, WA NPDES PERMIT No. WAR000139

Prepared for:

Alaskan Copper Works.
3405 6th Ave South,
Seattle, WA 98124

January 29, 2020

**STORMWATER POLLUTION PREVENTION PLAN CERTIFICATION FORM
ALASKAN COPPER FACILITY
SEATTLE, WASHINGTON**

The Permittee shall use this form to sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S3 and S8 of the Industrial Stormwater General Permit.

- A SWPPP certification form needs to be completed and attached to all SWPPPs.
- Each time a Level 1, 2, or 3 Corrective Action is required, this form needs to be re-signed and re-certified by the Permittee, and attached to the SWPPP.

Is this SWPPP certification in response to a Level 1, 2 or 3 Corrective Action? ☐ Yes ☒ No

If Yes: Type of Corrective Action?: ☐ Level 1 ☐ Level 2 ☐ Level 3*

Date SWPPP update/revision completed: January 29, 2020

Briefly describe SWPPP Update (use backside, if necessary):

SWPPP updated to be consistent with updated ISGP requirements including site map, facility assessment and BMPs.

***Note:** For Level 3 Corrective Actions, a *Qualified Industrial Stormwater Professional* must review the revised SWPPP, and sign and certify below, in accordance with Condition S8.D.2.:

"The Permittee has made appropriate revisions to the SWPPP to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. Based on my review of the SWPPP, discharges from the facility are reasonably expected to meet the ISGP benchmarks upon implementation."

Qualified Industrial Stormwater Professional's Printed Name

Title

Qualified Industrial Stormwater Professional's Signature

Date

"I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Carl Vinke
Operator's Printed Name *

Env. Comp. mgr
Title

Carl Vinke
Operator's Signature *

1-29-2020
Date

* Federal regulations require this document to be signed in accordance with Condition G2.

TABLE OF CONTENTS

| | <u>Page</u> |
|--|-------------|
| 1.0 INTRODUCTION | 1-1 |
| 2.0 FACILITY ASSESSMENT (S3.B.2) | 2-4 |
| 2.1 FACILITY DESCRIPTION (S3.B.2.a) | 2-4 |
| 2.1.1 Parcel 4155 | 2-4 |
| 2.1.2 Parcel 3736 | 2-5 |
| 2.1.3 Parcel 0012 | 2-6 |
| 2.1.4 Potential Sources of Stormwater Pollution (S3.B.2.b) | 2-6 |
| 2.2 STORMWATER DRAINAGE (S3.B.1.c.) | 2-7 |
| 3.0 BEST MANAGEMENT PRACTICES (S3.B.4.) | 3-1 |
| 3.1 OPERATIONAL SOURCE CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.i.) | 3-2 |
| 3.1.1 Pollution Prevention Team (S3.B.3) | 3-2 |
| 3.1.2 Good Housekeeping (S3.B.4.b.i.2) | 3-2 |
| 3.1.3 Preventive Maintenance (S3.B.4.b.i.3) | 3-3 |
| 3.1.4 Spill Prevention and Cleanup (S3.B.4.b.i.4) | 3-5 |
| 3.1.5 Employee Training (S3.B.4.b.i.5) | 3-7 |
| 3.1.6 Inspections and Recordkeeping (S3.B.4.b.i.6) | 3-7 |
| 3.2 STRUCTURAL SOURCE CONTROL AND OPERATIONAL BEST MANAGEMENT PRACTICES BY INDUSTRIAL ACTIVITY (S3.B.4.b.ii) | 3-8 |
| 3.2.1 BMPs for Fueling at Dedicated Stations | 3-9 |
| 3.2.2 BMPs for Loading and Unloading Areas for Liquid or Solid Material | 3-11 |
| 3.2.3 BMPs for Maintenance of Stormwater Drainage and Treatment Systems | 3-12 |
| 3.2.4 BMPs for Roof/Building Drains at Manufacturing Buildings | 3-13 |
| 3.2.5 BMPs for Storage of Liquids or Dangerous Waste Containers (Outside) | 3-14 |
| 3.2.6 BMPs for Storage of Liquids in Permanent Aboveground Tanks | 3-15 |
| 3.3 TREATMENT BEST MANAGEMENT PRACTICES (S3.B.4.b.iii) | 3-16 |
| 3.4 STORMWATER PEAK RUNOFF AND VOLUME CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.iv) | 3-17 |
| 3.5 EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.v) | 3-17 |
| 4.0 STORMWATER MONITORING PLAN (S3.B.5) | 4-1 |
| 4.1 MONITORING LOCATIONS, REQUIREMENTS, AND METHODS | 4-1 |
| 4.1.1 Methods for Visual Inspections | 4-2 |
| 4.1.2 Methods for Stormwater Sampling | 4-2 |
| 4.2 RECORDKEEPING | 4-4 |
| 4.3 SUBMITTAL OF SAMPLES TO THE LABORATORY | 4-4 |
| 4.4 EVALUATION OF SAMPLING RESULTS | 4-4 |
| 4.5 SUBMITTING THE SAMPLING RESULTS TO ECOLOGY | 4-7 |

FIGURES

| <u>Figure</u> | <u>Title</u> |
|---------------|--|
| 1 | Vicinity Map |
| 2 | Stormwater Drainage Basins and Potential Contaminant Sources |
| 3 | Building 3405 Drainage Basins and 2019 modifications |

TABLES

| <u>Table</u> | <u>Title</u> |
|--------------|--|
| 1 | Summary of ACW Stormwater Drainage Basins |
| 2 | Parameters required to be sampled quarterly by ACW |

APPENDICES

| <u>Appendix</u> | <u>Title</u> |
|-----------------|---|
| A | Figures |
| B | Current ISGP and Ecology cover letter |
| C | Blank SWPPP Forms |
| D | Completed SWPPP Forms (Monthly Inspection, Quarterly Sampling, Maintenance) |
| E | Other Ecology Letters |

Summary of Submittals, Onsite Documentation and Required Activities

| Permit Section | Submittal | Frequency | Due Date(s) |
|----------------|--|---------------------|---|
| <u>S1.F</u> | Conditional "No Exposure" Certification (CNE) Form | As necessary | As necessary, with renewals every 5 years |
| <u>S2.A</u> | Application for Permit Coverage | As necessary | As necessary |
| <u>S2.B</u> | Request Modification of Permit Coverage | As necessary | As necessary |
| <u>S2.D</u> | Request Transfer of Coverage | As necessary | As necessary |
| <u>S8.D</u> | Level 3 Engineering Report | As necessary | May 15 th , prior to Level 3 deadline ¹ |
| <u>S8.D</u> | Level 3 O&M Manual | As necessary | 30 days after Level 3 installation |
| <u>S9.B</u> | Discharge Monitoring Reports (DMRs) | 1/quarter | February 15 th May 15 th August 15 th November 15 th |
| <u>S9.C</u> | Annual Report | 1/year | May 15 th |
| <u>S9.D</u> | SWPPP, if requested by Ecology | Per Ecology request | Within 14 days of request |
| <u>S9.F</u> | Noncompliance Notification | As necessary | Within 30 days of noncompliance event |
| <u>G8</u> | Duty to Reapply | 1/permit cycle | July 3, 2024 |

SUMMARY OF REQUIRED ONSITE DOCUMENTATION

| Permit Condition(s) | Document Title |
|-------------------------------|--|
| <u>S3</u> | Stormwater Pollution Prevention Plan (SWPPP) ³ |
| <u>S9.C</u> | Copies of Annual Reports |
| <u>S9.D.1.a</u> | Copy of Permit |
| <u>S9.D.1.b</u> | Copy of Permit Coverage Letter |
| <u>S9.D.1.c</u> | Original Sampling Records (Field Notes and Laboratory Reports) |
| <u>S7.C</u> & <u>S9.D.1.d</u> | Site Inspection Reports |
| <u>S9.D.1.i</u> | Copies of Discharge Monitoring Reports (DMRs) |

SUMMARY OF SELECTED REQUIRED ACTIVITIES

| Permit Condition | Activity Description | Frequency |
|------------------|--------------------------------------|---|
| S7 | Monthly Inspections | Qualified personnel conduct and document visual inspections of the site monthly on the monthly inspection form |
| S3.B.5 | Employee Training | Conducted at least once per year |
| S7 | BMP Inspections | At least once per month during monthly inspections |
| S3.B.4.b.i.2.a | Vacuum Sweeping | Not less than once per quarter. ACW has selected to Sweep not less than once per month. |
| S3.B.4.b.i.3.a | Catch Basins Cleaning | As needed when depths of debris reaches 60% of the sump depth and when the depth of debris reaches 6 inches below outlet pipe |
| S3.B.4.b.i.2.d | Cover Solid Waste Storage Containers | At all times when not in use with storm resistant lids |
| S7 | Stormwater Observations | At least once per quarter during qualifying storm events and also during monthly inspections if conducted during a storm event |
| S4 | Sampling | Sampling at applicable stormwater discharge locations shall be conducted at least once per quarter: 1st Quarter = January, February, and March 2nd Quarter = April, May, and June 3rd Quarter = July, August, and September 4th Quarter = October, November, and December |
| S6.C | Additional Sampling | For discharge to impaired waters and Puget Sound sediment cleanup sites, monitor for total suspended solids (TSS), and a 30 mg/L discharge limit for TSS applies starting 2017 |
| S9.A | DMR Submittal | Submit to Ecology within 45 days of the end of each quarter |
| S8 | Corrective Actions | Implement: -Level One Corrective Actions (CAs) within 45 days of the end of each quarter; -and Level Two and Three CAs by Sept 30 of the following year |
| S9.C | Submit Annual Report | Submit to Ecology by May 15 of each year starting in 2011 |

1.0 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the Alaskan Copper Works (ACW) facility (the “Facility”), located in Seattle, Washington, in accordance with the requirements outlined in the Washington State National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater General Permit (ISGP) (Ecology 2019); ACW’s permit number is WAR000139. A copy of the ISGP is provided in Appendix B.

This SWPPP is, as defined in the Permit, a “documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of stormwater.” In accordance with the Permit, this SWPPP contains five required SWPPP components [facility map, facility assessment, Best Management Practices (BMPs), Spill Prevention and Emergency Cleanup Plan (SPECP), and a sampling plan] and is divided into the following three main sections:

- **Facility Assessment (Section 2.0):** Presents a general facility description, facility map, inventory of industrial activities, and inventory of materials.
- **Best Management Practices (Section 3.0):** Describes BMPs in use or planned for use at the Facility including a listing of the Alaskan Copper pollution prevention team.
- **Stormwater Monitoring Plan (Section 4.0):** Presents a plan for conducting quarterly stormwater sampling and monthly site inspections at the Facility.

Where applicable, the Permit Condition reference is included in parentheses throughout the text of this SWPPP for major headings and select subheadings. This document will be updated, as needed, to reflect changes to the Alaskan Copper stormwater management program, including changes in BMPs and the addition of new industrial activities or potential pollutant sources, or in response to Permit modifications. Each update will be accompanied by a newly signed SWPPP Certification Form (first page of SWPPP). A copy of this SWPPP will be maintained at the Alaskan Copper office at 628 South Hanford. A list of the major revisions to previous versions of the SWPPP is presented below.

| Date | Revision |
|---------------|---|
| November 2005 | Add ROMIC Environmental Technologies, Inc. as an authorized agent. |
| November 2007 | Add Clean Harbors Environmental Services, Inc. as an authorized agent. |
| May 2009 | Update SWPPP; add Clean Harbors Environmental Services Personnel to SWPPP. |
| July 2009 | SWPPP revisions and updates. |
| January 2010 | Update SWPPP to comply with 2010 Industrial Stormwater General Permit. |
| May 2010 | Revise SWPPP to include additional operational source control and treatment BMPs as part of 1Q10 level one corrective actions for elevated sample results at cb331707 and cb330001. (Revision = reduced truck traffic; installed downspout filter units and planter barrels). |
| August 2010 | Revise SWPPP to include additional operational source control and structural BMPs as part of 2Q10 level one corrective actions for elevated sample results at cb331707 and cb330001. (Revision = analyze roof drain downspouts). |

| Date | Revision |
|--------------------|---|
| September 2010 | Revise SWPPP to include the following BMP: "If catch basins or storm drains are observed to not drain properly and contribute to turbidity and suspended solids, then inspect drain lines for debris or sediment blockage or broken piping. Clean and repair or replace storm drain lines as necessary to restore proper drainage." In September 2010 a storm drain video/cleaning contractor was hired to conduct storm drain video work and cleaning as necessary due to the lack of proper drainage out of cb330001. The video inspection could not find any particularly large deposit of solids or other signs of storm drain blockage and therefore pipe cleaning was not determined to correct the issue of poor drainage (and possible backup of stormwater/solids from the City storm drain line) at that location. . |
| November 2010 | Revise SWPPP to include additional operational and structural source control BMPs as part of 3Q10 and 4Q10 level one and/or 2010 level two corrective actions for elevated sample results at cb331707 and cb330001. [Revisions = increased frequency of cleaning or replacing cb inserts; sample effluent of downspout filter units and/or planter barrels at cb331707 if benchmarks are exceeded starting with the first quarter of 2011. In response to this BMP, filtration media at rain gardens A and C and at downspout filters B and D were replaced during April/May 2011. (Revised note: This BMP does not apply to cb330001 which did not have planter barrels until summer 2011)]. |
| March 24, 2011 | Revise SWPPP to include additional operational source control BMPs as part of 1Q11 level one corrective actions for elevated sample results at cb331707 and cb330001. (Revisions = environmentally preferable materials to be emphasized; catch basin filters to be replaced instead of cleaned if filter performance poor). |
| July 13, 2011 | Revise SWPPP to include additional operational source control and treatment BMPs as part of 2Q11 level one and/or 2010 level three corrective actions for elevated sample results at cb331707 and cb330001. (Revision = additional roof downspout filters/planter barrels added). |
| September 29, 2011 | Revise SWPPP to include Appendix D technical memorandum addressing the full 2010 triggered level three corrective action stormwater treatment BMPs for elevated sample results at cb331707 and cb330001 finalized on September 26, 2011. (Revisions = oyster shells added to catch basin as treatment media for cb330001; documented previous installation of downspout filter units and/or planter barrels in May 2010 and/or July 2011 as level three corrective action for cb331707 and cb330001). These BMPs also address the required 3Q11 level one corrective action BMP requirements for cb331707 and cb330001). Note The description of the BMPs added to the SWPPP on July 14, 2011 as part of 2Q11 Level One Corrective Actions were moved from the main body of the SWPPP to Appendix D so that the full extent of 2010 Level Three Corrective Action stormwater treatment BMPs implemented at the facility are all described in Appendix D. |
| February 13, 2012 | Revise SWPPP to include a new attachment of an updated facility map showing stormwater treatment units, including the installation of a second roof downspout rain barrel for cb330001 which was installed in August 2011. Revise SWPPP revision table for clarity (minor edits to previous SWPPP revision dates, etc.). Note: Per level one corrective action requirement for elevated sample results at sampling location cb331707, the SWPPP was reviewed and found to be in compliance with the Permit. No additional operational BMPs from the Stormwater Management Manual from Western Washington (which had not already been implemented) were found that would be applicable to the facility. Existing operational BMPs (sample results from downspout filter units and/or planter barrels) will be monitored to determine a suitable approach of achieving benchmark values – possibly as part of 2012 level two or level three corrective action(s) depending on future 2012 results from sampling location cb331707. |
| May 11, 2012 | Revise SWPPP to include planned schedule for sampling of inlet/outlets during the second quarter of 2012 of select treatment systems that drain into cb331707. Results of sampling will be used to determine if improved O&M of existing treatment units is needed or if additional BMPs might be needed in the future. Based on first quarter 2012 results and an assessment of the facility SWPPP, no additional BMPs beyond treatment system sampling were added to the SWPPP at this time. Note: A sampling schedule for treatment system units that drain into cb331707 has been added to this SWPPP as table 3. Sampling is scheduled for the second quarter of 2012 or the next quarter in which there is a qualifying rain event. Table 3 also includes results of previous treatment system unit sampling results and will be updated each time treatment system units are sampled. |

| Date | Revision |
|-------------------|--|
| November 15, 2013 | <p>The SWPPP was revised to remove the requirement to sample for TSS, as the facility does not discharge to a 303(d)-listed waterbody. A letter from the Washington State Department of Ecology stating that the facility does not discharge to a 303(d)-listed waterbody was added to the SWPPP as Appendix E.</p> <p>The facility site map provided in Figure 2 has been updated to add stormwater surface flow direction arrows.</p> <p>Appendix D has been updated from the September 2011 Level Three Corrective Actions Technical Memorandum (which addressed corrective actions triggered by the 2010 sampling results) to the May 2013 Engineering Report (which addresses corrective actions triggered by the 2012 sampling results). The May 2013 Engineering Report describes the plan to expand roof drain downspout stormwater treatment at the facility by installing new stormwater treatment units. The SWPPP was revised to include a description of the expanded stormwater treatment BMPs. In addition, Table 3, mentioned above in the May 11, 2012 revision description, has been moved from the main body of the SWPPP to the Engineering Report in Appendix D.</p> <p>Other minor revisions were made to include the new Industrial Stormwater General Permit requirements that went into effect under the current Permit (effective date of July 1, 2012).</p> |
| January 15, 2015 | <p>The SWPPP has been revised to reflect the discontinuation of industrial operations at Building 3317 and the area south of that building, along with subleasing of that building and the requested elimination of the use of the sampling point at that location. Changes were also made to add total suspended solids (TSS) monitoring and other conditions of the new revised Permit that became effective January 2, 2015.</p> |
| February 15, 2017 | <p>Alaskan Copper has continued to consolidate and reduce its area of operations. A portion of Building 3300 and the paved area south of it were leased to another business. In addition, the paved area south of Bldg. 3300 is now used only for storage of clean stainless steel final product that provides no potential source of concern for copper, zinc, turbidity, or suspended solids. No other Industrial activity occurs in areas not draining to the combined/sanitary sewer. With that property change the designated sampling point has been changed as of 3rd quarter 2016.</p> <p>The SWPPP is also updated to address the unexpected rise in copper and zinc concentration despite the elimination of exposed activity, despite the continued monthly and quarterly pollutant source control inspections/actions, and despite the continued use of catch basin stormwater treatment. Therefore, based on 2016 results, a new engineering report is being prepared for a new stormwater treatment system, and the report will be completed in advance of the May 15, 2017 deadline.</p> |
| November 25, 2018 | Added Catchment Solutions LLC as an authorized agent and added discussion on 3300 treatment system |
| June 15, 2018 | Revised SWPPP with updated facility assessment and site figures. Changed laboratory where samples are delivered. |
| March 1, 2019 | Replaced using 10-micron bag filters with 5-micron bag filters in the 3300 treatment system as a level one corrective action. |
| January 29, 2020 | Updated SWPPP to reflect 2020 ISGP permit requirements. SWPPP BMPs were revised to include 3405 treatment system which is still awaiting pilot test results and approval from Ecology (expected April, 2020). Updated figures provided. |

2.0 FACILITY ASSESSMENT (S3.B.2)

As stated in the Permit, the facility assessment includes: “a description of the facility; an inventory of facility activities and equipment that contribute to or have the potential to contribute any pollutants to stormwater; and, an inventory of materials that contribute to or have the potential to contribute pollutants to stormwater.”

2.1 FACILITY DESCRIPTION (S3.B.2.a)

ACW operates a metal fabrication business focused on manufacturing corrosion-resistant alloy products. The main operation at ACW is fabricating stainless steel pipe, fittings, and pressurized vessels. The Facility operates under the Standard Industrial Classification Code 3498 (fabricated pipe and fittings) and North American Industry Classification System Code 332313 (plate work manufacturing). Normal business hours are between 6:00 a.m. and 11:30 p.m. Operations are split between two shifts with 108 employees operating on day shift and 28 employees operating on night shift. ACW manufactured or fabricated approximately 1.3 million lbs of pipe and fittings in 2017. Metals storage (raw materials and finished product) is the principal outdoor activity. Other activities include equipment maintenance (a maintenance shop is located in Building 628) and the loading and unloading trucks. There are no seasonal variations in the operating hours.

The Alaskan Copper Seattle Facility is located on multiple parcels along 6th Ave. S, between S Hinds Street and S Forest Street. Parcel-specific operations and drainage characteristics for the facility are presented below:

The Facility comprises four parcels along 6th Ave S (i.e., Parcels 4155, 0012, 3765, and 3736). Operations are primarily conducted in warehouses with finished product storage and material loading and unloading taking place outside. The majority of the raw material product storage is within basins that either discharge to ground or the County combined sewer system. Operations vary within each building. Specific operations and drainage characteristics for each parcel and building are further discussed below. Figure 1 presents the vicinity map of Alaskan Copper Works. Figure 2 presents the Facility map and identifies building addresses, discharge points (DPs), associated outfalls, stormwater infrastructure and potential contaminant sources. Figure 3 is a site map for the 3405 building and improvements that were implemented in 2019, including coating of the warehouse roof and installing treatment for the DP10 basin.

2.1.1 PARCEL 4155

Parcel 4155 is situated along the western edge of 6th Ave S and features two buildings (i.e., Buildings 3405 and 3317). Building 3405 serves as a warehouse and includes the administrative offices in

the north extension. The majority of roof runoff from the administrative office portion is routed to the County's combined sewersystem. The warehouse is split between two operations. The north high-bay portion of the warehouse is ACW's welding fabrication and finishing shop. The south lower roof portion of the warehouse is tenant space. A wall inside the warehouse segregates ACW's operations from those of the tenant. The majority of the warehouse roof discharges to the County's combined sewer system, while a small portion along the eastern edge of the roof is routed to the stormwater system. The parking lot east of the warehouse is a tenant parking lot and is routed to the city's MS4. The outdoor area south of the warehouse is also provided for tenant operations and is enclosed by a fence. This area is partially unpaved, and stormwater infiltrates in the ground. West of Building 3405, ACW stores small quantities of finished product and wood and metal waste containers. Open sided connex boxes are used to store material. Also, a trash compactor is located in this area. This area is partially unpaved, and stormwater infiltrates in the ground. Building 3405 and the building to the north (Building 3317) share a common driveway/parking area in the vacated S Hinds St right-of-way (ROW). ACW does not operate in Building 3317, but the south half of the building's roof and parking area drain to ACW's drainage system. All stormwater from the underground conveyance system north of the 3405 building is routed to a lift. The lift station is routed to a centralized treatment system located just east of the 3405 building. The highbay downspouts along the eastern edge of the warehouse were rerouted to this treatment system as well. The treatment system is designed for the waterquality flow rate of 35 gpm and discharges to the lift station outlet pipe where high-flow bypass is allowed to the MS4 via a single outfall (DP-10) into a City-owned maintenance hole within the 6th Ave S ROW.

2.1.2 PARCEL 3736

Parcel 3736 is located north of S Hanford St and east of 6th Ave S and has two buildings (i.e., Buildings 2958 and 628) and multiple drainage basins. Building 2958 houses ACW's human resources department, serves as storage for finished fittings and smaller components, and is where the company conducts shipping and receiving. The roof mainly discharges stormwater to the County's combined sewer system. ACW also stores parts north of the building in partially paved areas. Stormwater in these areas infiltrates the ground near the rail ROW north of the Facility. South of Building 2958, raw materials and finished products are stored outside. The majority of stormwater from this area discharges to the County's combined sewer system; however, a small drainage basin (D01) along the north half of the S Hanford St ROW collects stormwater through a single CB at the edge of the property. This stormwater discharges to the north lift station that is routed to the 2018 treatment system.

The second building, building 628, houses the maintenance shop; all maintenance activities are conducted inside this building. The roof of the maintenance shop, except for a small portion along the

easterly edge, discharges to the County's combined sewer system. Stormwater from the easterly edge of the roof and the pavement east of the building discharges to the ground via infiltration on the north side of the parcel.

2.1.3 PARCEL 0012

Parcel 0012 is located east of 6th Ave S, between the S Hinds St ROW to the south and the S Horton St ROW to the north and has a single building (i.e., Building 3300). A tenant operates Building 3300, with tenant parking located west of the building; however, ACW stores finished product to the north and south of Building 3300. Stormwater from this parcel is segregated into six stormwater drainage sub-basins (i.e. D05, D06, D07, D08, D09, and D95). Additionally, stormwater runoff from the northeastern portion of the roof, a portion of pavement north of the building, and pavement east of the building discharges to the County's combined sewer system. The remaining area between Buildings 3300 and 3200 (which is located on Parcel 3765), and the northwestern portion of the roof drains into drainage basin D03 at a catch basin east of the treatment system. The footprint of the treatment system and a small area of the parking lot to the west has a paved ditch line where stormwater is conveyed to a CB near the central lift station. This CB is routed directly to the central lift station. A small portion of pavement northwest of Building 3300 (drainage basin D05) discharges to the MS4 through a CB (DP-05) on the southeast corner of the S Horton St and 6th Ave S intersection. The north half of the tenant parking lot, west of Building 3300 (drainage basin D06) discharges stormwater to the MS4 through a CB (outfall DP-06) that is near the DP-05 CB. The southeast portion of Building 3300 and just over half of the paved portion south of the building (drainage basin D07) drains to the south lift station which has a grated lid. The south portion of the parking lot, west of Building 3300 (drainage basin D08) drains to the MS4 through a CB (DP-08) on the northeast corner of the S Hinds St and 6th Ave S intersection. Drainage basin D09 receives minimal drainage from the parking lot via a CB (DP-09) near the DP-08 CB and discharges to the MS4. The southwest portion of the Building 3300 roof along with the majority of the tenant's fenced in storage yard (tenant basin) drains to the MS4 through a CB within the tenant storage area. A small basin at the entrance to the parking lot at S Horton St discharges to the MS4 through a CB (DP-9.5) on the southeast corner of the S Horton St and 6th Ave S intersection. Drainage basins D05, D06, D08, D09, and D95 receive drainage solely from parking and non-industrial areas and are routed directly to the MS4.

2.1.4 POTENTIAL SOURCES OF STORMWATER POLLUTION (S3.B.2.b)

The following items that result from Facility operations, or that are stored at the Facility, are potential sources of stormwater pollution:

Cutting fluid

Cooling fluid

Lubrication grease
Fine particulates from processing

Galvanized or copper alloy metal products
Facility buildings (metals from roofs or walls)

In accordance with Permit condition S3.b.2.c.iii, this SWPPP also addresses potential stormwater pollutants from past activities, by noting that no known potential sources of pollutants from past activities, materials, and spills were previously handled, treated, stored, or disposed of in a manner to allow ongoing exposure to stormwater. There have been no known or recorded significant spills or leaks of toxic or hazardous pollutants at the Facility that migrated off-property within the last 5 years. Minor spills may have occurred inside and outside of the Facility structures, but were contained and promptly cleaned up.

To prevent potential pollutants associated with these potential sources from reaching stormwater, the Facility employs the BMPs described in Section 3.0 of this SWPPP.

2.2 STORMWATER DRAINAGE (S3.B.1.c.)

ACW has 7 discrete locations where stormwater discharges into the MS4. Of those, 2 are discharge points with industrial activity and 5 are solely parking without industrial activity. A summary of the Facility's stormwater drainage basin characteristics is presented in Table 1.

Table 1. Summary of ACW Stormwater Drainage Basins

| Receiving Water | ACW Subbasin | ACW Stormwater Discharge Point | Basin area (acres) | Contributing buildings | Contributing Activities | Industrial Activity (Y/N) |
|--|--------------|--------------------------------|--------------------|------------------------|--|---------------------------|
| Lower Duwamish Waterway (Diagonal Outfall) | D01 | DP-3 | 0.28 | None | and unloading of trucks. Runoff from 6th Ave S. | Yes |
| | D02 | DP-3 | 0.22 | None | and unloading of trucks. Runoff from 6th Ave S. | Yes |
| | D03 | DP-3 | 2.3 | 3200 | Parking lot west of building 3200. Finished product material storage. Runoff from 6th Ave S. | Yes |
| | D05 | DP-5 | 0.03 | None | Parking lot west of 3300 | No |
| | D06 | DP-6 | 0.16 | None | Parking lot west of 3300 | No |
| | D07 | DP-3 | 0.89 | 3300 | Finished product material storage. | Yes |
| | D08 | DP-8 | 0.19 | None | Parking lot west of 3300. Tenant storage yard. | No |
| | D09 | DP-9 | 0 | none | Parking lot west of 3300. Receives little to no runoff. | No |
| | D95 | DP-9.5 | 0.04 | None | Parking lot west of 3300. Runoff from 6th Ave S. | No |
| | D10 | DP-10 | 0.825 | 3317 and 3405 | Sections of 3317 and 3405 roof. Parking in S Hinds St. ROW. Forklift parking. | Yes |
| | Tenant | Tenant | 0.09 | 3405 | Tenant parking lot east of 3405 warehouse. | No |
| | Tenant | Tenant | 0.2 | 3300 | Tenant storage yard | No |

All stormwater that is discharged to the MS4 discharges to the Lower Duwamish waterway at the Diagonal Outfall (47.56314 °N, -122.34531 W).

All industrial stormwater basins along the east side of 6th Ave South are routed through three lift stations to the 2018 treatment system and discharges to the DP03 outfall. All industrial stormwater along the west side of 6th Ave South are routed to the 2019 treatment system and discharges to the DP10 outfall.

3.0 BEST MANAGEMENT PRACTICES (S3.B.4.)

The Permit identifies the following five categories of BMPs that may be needed at a facility to control stormwater discharge:

- **Operational Source Control BMPs (Section 3.1; S3.B.4.b.i.):** These BMPs are required at all facilities covered under the Permit and are managerial-type measures that are implemented to prevent or reduce pollution of stormwater; they specifically exclude construction of pollution control measures. Examples include general housekeeping activities, formation of a pollution prevention team, and employee training.
- **Structural Source Control BMPs (Section 3.2; S3.B.4.b.ii.):** These BMPs require construction or use of a physical structure to control pollution of stormwater. Examples include construction of a roof over a drum storage area or a containment berm around an aboveground storage tank.
- **Treatment BMPs (Section 3.3; S3.B.4.b.iii.):** These BMPs consist of actual stormwater treatment systems designed to treat polluted stormwater. Examples include catch basin insert filters, enhanced sedimentation vault devices, and use of activated carbon to remove petroleum hydrocarbons.
- **Stormwater Peak Runoff Rate and Volume Control BMPs (Section 3.4; S3.B.4.b.iv.):** These BMPs provide stormwater detention or retention to reduce the peak rate of stormwater runoff, where necessary to minimize streambank erosion within receiving waters.
- **Erosion and Sediment Control BMPs (Section 3.5; S3.B.4.b.v.):** These BMPs are designed to limit soil erosion and to control eroded soil, and are most commonly used during site construction. Examples include seeding and covering exposed soil, and the use of silt fencing.

The following section provides a general description of the BMPs (in italics) that are required by the Permit and then describes in greater detail the specific application of these BMPs at the Facility. The BMPs contained in this SWPPP are consistent with the BMPs contained in the Washington State Department of Ecology (Ecology) 2019 *Stormwater Management Manual for Western Washington* (2019 Manual). Therefore, demonstration of BMP equivalency is not provided in this SWPPP. In addition, the 2019 Manual contains BMPs that provide all known, available, and reasonable methods of prevention, control, and treatment (AKART) of stormwater pollution to ensure that discharges do not cause or contribute to a violation of water quality standards and comply with federal technology-based treatment requirements under 40 CFR 125.3.

The Permit lists specific operational and structural source control BMPs that must be implemented at all permitted facilities and requires permittees to implement all operational source control BMPs, structural source control BMPs, and treatment BMPs listed as “applicable” in Ecology’s 2019 Manual. For Alaskan Copper, these “applicable” BMPs are found in Volume IV of the 2019 Manual, available online at: <http://www.ecy.wa.gov/programs/wq/stormwater/manual.html>. This list, along with each BMP’s potential applicability to the Facility, is provided in Table 1. Additional descriptions of the applicable BMPs for the Facility are provided in the following sections.

3.1 OPERATIONAL SOURCE CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.i.)

This section describes operational source control BMPs that are required by the Permit for all industrial activities and operations covered under the Permit. Recommended BMPs are also listed where applicable. Additional operational BMPs are listed in Section 3.2 for specific industrial activities and operations, where required by the Permit.

3.1.1 POLLUTION PREVENTION TEAM (S3.B.3)

Unless noted otherwise, the Facility adheres to the following pollution prevention team BMPs, applicable under the 2014 Manual.

- *The SWPPP shall identify specific individuals by name or by title within the organization (pollution prevention team) whose responsibilities include: SWPPP development, implementation, maintenance, and modification.*
 - **Pollution Prevention Team:** The Pollution Prevention Team for the Facility shall consist of the Responsible Official and the SWPPP Coordinator. The Responsible Official is the person with overall responsibility for Permit compliance, has delegated authority to sign discharge monitoring reports (DMRs) and inspection forms, and is to ensure that adequate resources are made available to the SWPPP Coordinator in order to implement the BMPs and monitoring requirements in the SWPPP. The SWPPP Coordinator has overall responsibility for developing, implementing, maintaining, and revising this SWPPP. Other Facility employees will assist the Pollution Prevention Team as necessary. Contact information for the Facility Responsible Official and SWPPP Coordinator is provided below.

| PP Team Role | Name | Office Phone / Cell Phone |
|----------------------|-----------------|---------------------------|
| Responsible Official | Carl Vinke | (206) 382-6590 / (b) (6) |
| SWPPP Coordinator | Gerald Thompson | (206) 382-8379 / |

Catchment Solutions (206-535-8284), other environmental consulting firms, or other designated contracted personnel, may assist the Facility in SWPPP preparation, employee training, stormwater sampling, and BMP assessment services.

3.1.2 GOOD HOUSEKEEPING (S3.B.4.b.i.2)

The following good housekeeping BMPs are considered applicable in the 2014 Manual and are adhered to at the Facility, unless noted otherwise.

- *Promptly contain and clean up solid and liquid pollutant leaks and spills, including oils, solvents, fuels, and dust, from manufacturing operations on any exposed soil, vegetation, or paved area.*
 - **Spills:** See Section 3.1.4 on spill prevention and cleanup.
- *Clean oil, debris, sludge, etc., from all BMP systems regularly, including catch basins, settling/detention basins, oil/water separators, boomed areas, and conveyance systems, to*

prevent the contamination of stormwater. Refer to the Washington State Department of Ecology's (Ecology) regional offices to assist in determining if a waste must be handled as hazardous waste.

- **Catch Basins:** See Section 3.2.3 on Maintenance of Stormwater Drainage and Treatment Systems.
- *Promptly repair or replace substantially cracked or otherwise damaged paved secondary containment, high-intensity parking, and any other drainage areas, which are subjected to pollutant material leaks or spills.*
- *Promptly repair or replace all leaking connections, pipes, hoses, valves, etc., that can contaminate stormwater.*
- *Sweep paved material handling and storage areas regularly, as needed, for the collection and disposal of dust and debris that could contaminate stormwater. Do not hose down pollutants from any area to the ground, storm drain, conveyance ditch, or receiving water unless necessary for dust control purposes to meet air quality regulations and unless the pollutants are conveyed to a treatment system approved by the local jurisdiction.*

In addition to these BMPs from the 2019 Manual, the Permit also specifically requires the following Good Housekeeping BMPs:

- *Vacuum paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated pollutants a minimum of once per quarter.*
 - **Vacuum Sweeping:** Facility personnel or outside contractors inspect, clean, and maintain areas of the Facility that accumulate dust and other debris. Paved areas are vacuum-swept monthly. Sweeping the dirt and associated pollutants from paved areas of the Facility can be one of the most effective stormwater pollutant source control measures, so increasing the frequency of sweeping will be considered any time that stormwater benchmarks are found to have been exceeded.
- *Identify and control all onsite sources of dust to minimize stormwater contamination from the deposition of dust on areas exposed to precipitation.*
- *Inspect and maintain bag houses monthly to prevent the escape of dust from the system. Immediately remove any accumulated dust at the base of exterior bag houses.*
 - **Bag House No Longer Used:** Since the removal of the saw in 2013, the bag house is no longer needed or used at the facility.
- *Keep all dumpsters under cover or fit with a lid that must remain closed when not in use.*

The following good housekeeping BMP from the 2014 Manual is not required but recommended:

- *Recycle materials, such as oils, solvents, and wood waste, to the maximum extent possible.*
 - **Recycling:** Oil is recycled at the Facility. Used oil for recycling is stored in an approximately 500-gallon drum on the northern side of Building 628, within the area that drains to the combined sanitary sewer system.

3.1.3 PREVENTIVE MAINTENANCE (S3.B.4.b.i.3)

The following preventive maintenance BMPs are considered applicable in the 2019 Manual and are adhered to at the Facility, unless noted otherwise.

- *Prevent discharge of unpermitted liquid or solid wastes, process wastewater, and sewage to ground or surface water, or to storm drains that discharge to surface water, or to the ground.*
- *Do not connect floor drains in potential pollutant source areas to storm drains, surface water, or to the ground.*
- *Conduct all oily parts cleaning, steam cleaning, or pressure washing of equipment or containers inside a building, or on an impervious contained area, such as a concrete pad. Direct rinse water and contaminated stormwater from such an area to a sanitary sewer where allowed by the local sewer authority, or to other approved treatment.*
 - **Washing:** Parts cleaning (if needed) is conducted indoors. However, if Facility personnel wash vehicles or equipment outdoors in an area that discharges to the stormwater system, they ensure that washing is conducted only where the water will be contained within a catch basin with its outlet drain plugged, and where the washwater will be pumped out to the sanitary sewer system or hauled off site for appropriate treatment. Offsite drainage of wash-water or rinse-water to surface water is not allowed.
- *Do not pave over contaminated soil unless it has been determined that groundwater has not been and will not be contaminated by the soil. Call Ecology for assistance.*
- *Construct impervious areas that are compatible with the materials handled. Portland cement concrete, asphalt, or equivalent material may be considered.*
- *Use drip pans to collect leaks and spills from industrial/commercial equipment such as airplanes, trucks, and other vehicles, which are stored outside.*
- *At industrial and commercial facilities, drain oil and fuel filters before disposal. Discard empty oil and fuel filters, oily rags, and other oily solid waste into appropriately closed and properly labeled containers, and in compliance with the Uniform Fire Code.*
- *For the storage of liquids use containers, such as steel and plastic drums, that are rigid and durable, corrosion-resistant to the weather and fluid content, non-absorbent, watertight, rodent-proof, and equipped with a close fitting cover.*
- *For the temporary storage of solid wastes contaminated with liquids or other potential pollutant materials use dumpsters, garbage cans, drums, and comparable containers, which are durable, corrosion-resistant, non-absorbent, non-leaking, and equipped with either a solid cover or screen cover to prevent littering. If covered with a screen, the container must be stored under a lean-to or equivalent structure.*
- *Where exposed to stormwater, use containers, piping, tubing, pumps, fittings, and valves that are appropriate for their intended use and for the contained liquid.*

In addition to these BMPs from the 2014 Manual, the Permit also specifically requires the following Preventive Maintenance BMPs:

- *Clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe.*
 - **Catch Basins:** See BMPs for the Maintenance of Storm Drain Systems (Section 3.2.3).
- *Inspect all equipment and vehicles during monthly site inspections for leaking fluids such as oil, antifreeze, etc. Take leaking equipment and vehicles out of service or prevent leaks from spilling on the ground until repaired.*

- **Monthly Inspections:** Qualified personnel conduct and document visual inspections of the site monthly on the monthly inspection form. A blank monthly inspection form, as well as other blank forms, is provided at the beginning of Appendix C of this SWPPP. Monthly inspection criteria are the same criteria used during stormwater monitoring as described in Section 4.1.1, except that monthly inspections may occur during either storm or non-storm events, in which case monitoring of floating debris, discoloration, etc., associated with stormwater would not apply. However, monthly inspections conducted during a non-storm event may allow the inspector to observe possible illicit discharges.
- *Immediately clean up spills and leaks (e.g., using absorbents, vacuuming, etc.) to prevent the discharge of pollutants.*
- **Spills:** See Spill Prevention and Emergency Cleanup (Section 3.1.4).

The following preventive maintenance BMP from the 2014 Manual is not required but recommended.

- *Where feasible, store potential stormwater pollutant materials inside a building or under a cover and/or containment.*

3.1.4 SPILL PREVENTION AND CLEANUP (S3.B.4.b.i.4)

The following spill prevention and cleanup BMPs are considered applicable in the 2014 Manual and are adhered to at the Facility and specifically within the facility, unless noted otherwise.

- *Immediately upon discovery, stop, contain, and clean up all spills.*
 - **Spill Prevention:** See Spill Prevention and Emergency Cleanup BMPs below.
- *If pollutant materials are stored on site, have spill containment and cleanup kits readily accessible. Place and maintain emergency spill containment and cleanup kit(s) at outside areas where there is a potential for fluid spills. These kits should be appropriate for the materials being handled and the size of the potential spill.*
 - **Onsite Spill Response Supplies:** See “Spill Kits” below.
 - **Additional Spill Cleanup Assistance:** If a spill cannot be contained on site with available resources, then the Facility will contact a spill response contractor. One such spill response contractor is Clean Harbors, and their 24-hour spill response number is 800-OIL-TANK (800-645-8265). Their local telephone number is 253-639-4240.
- *If the spill has reached or may reach a storm sewer, groundwater, or surface water, notify Ecology immediately. Notification must comply with federal spill reporting requirements. To report a spill or to determine if a spill is a substance of a reportable quantity, call the Ecology regional office and ask for an oil spill operations or a hazardous waste specialist: Northwest Region (425) 649-7000. Ecology requires that oil spills be reported to the National Response Center (1-800-424-8802) and Washington State (1-800-258-5990 or 1-800-OILS-911). Report all non-oil spills to 1-425-649-7000. If the spill has reached or may reach a sanitary or a storm sewer, notify Ecology and the local sewer authority immediately. The local sewer authority is Seattle Public Utilities (206-684-3000).*

Spill Reporting Telephone Numbers:

Ecology Northwest Region (all spills and information) (425) 649-7000

National Response Center (oil spills)

1-800-424-8802

Washington State (oil spills)

1-800-258-5990 or 1-800-OILS-911

Seattle Public Utilities (spills to sanitary sewer)

(206) 684-3000

- *Do not flush absorbent materials or other spill cleanup materials to a storm drain. Collect the contaminated absorbent material as a solid and place in appropriate disposal containers.*

In addition to these BMPs from the 2014 Manual, the Permit also specifically requires the SWPPP to include a Spill Prevention and Emergency Cleanup Plan (SPECP). The SPECP is presented below and consists of the following required BMPs to prevent spills that can pollute stormwater.

- *Store all chemical liquids, fluids, and petroleum products on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater.*
 - **Spill Containment:** The 300-gallon diesel tank located at the northwest corner of Building 3405 is a double-walled steel tank to provide secondary containment. A short concrete block wall surrounds the tank to provide physical protection from forklift or other impacts.
- *Prevent precipitation from accumulating in containment areas with a roof or equivalent structure or include a plan on how it will manage and dispose of accumulated water if a containment area cover is not practical.*
- *Locate spill kits within 25 feet of all stationary fueling stations, fuel transfer stations, and mobile fueling units. At a minimum, spill kits shall include: i) Oil absorbents capable of absorbing 15 gallons of fuel. ii) A storm drain plug or cover kit. iii) A non-water containment boom, a minimum of 10 feet in length with a 12-gallon absorbent capacity. iv) A non-metallic shovel. v) Two five-gallon buckets with lids.*
 - **Spill Kits:** Oil absorptive materials and spill response equipment are located near the 300-gallon diesel storage tank. Spill kits contain the minimum components listed above and are inspected monthly.
- *Do not lock shut-off fueling nozzles in the open position. Do not “topoff” tanks being refueled. Block, plug, or cover storm drains that receive runoff from areas where fueling, during fueling.*
- *Use drip pans or equivalent containment measures during all petroleum transfer operations.*
- *Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas).*
- *Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible. Drain fluids from equipment and vehicles prior to onsite storage or disposal.*
- *Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason for spill; date/time clean-up completed, notifications made and staff involved.*
 - **Spill Log:** See spill log form, Worksheet 3, in Appendix D.

3.1.5 EMPLOYEE TRAINING (S3.B.4.b.i.5)

The following employee training BMP is considered applicable in the 2014 Manual and is adhered to at the Facility, unless noted otherwise.

- *Train all employees that work in pollutant source areas in identifying pollutant sources to stormwater and in understanding pollutant control measures, spill response procedures, and environmentally acceptable material handling practices, particularly those related to vehicle/equipment liquids such as fuels, and vehicle/equipment cleaning. Use Ecology's "Stormwater Pollution Prevention Planning for Industrial Facilities" (WQ-R-93-015, 9/93) as a training reference.*
 - **Employee Training:** Alaskan Copper provides in-house training at least once per year to applicable personnel. Training includes a review of good housekeeping BMPs, spill response procedures, and material management practices. The training covers these and other contents of this SWPPP and how employees make a difference in stormwater pollution prevention. Alaskan Copper maintains a log documenting training dates and attendees. The training log in Appendix D (Worksheet 4) will be maintained and updated. Training will emphasize the use of environmentally acceptable materials and coatings for any equipment to be used or stored outdoors in areas where stormwater runoff enters the storm sewer rather than the sanitary sewer. The selection of appropriate materials includes paints, fencing, storage racks, roofing, and other equipment, so that use of materials containing zinc or copper will be reduced and eliminated to the extent practical. Acceptable materials would include epoxy or other non-metal paints for outdoor structures and non-galvanized storage racks or other outdoor structures. Also, as outdoor materials age and need to be replaced (such as facility roofing where apparent copper and zinc sources have been identified) to replace that material with products that will not be a source of copper or zinc to stormwater.

3.1.6 INSPECTIONS AND RECORDKEEPING (S3.B.4.b.i.6)

The following inspection and recordkeeping BMPs are considered applicable in the 2014 Manual and are adhered to at Alaskan Copper, unless noted otherwise.

- *Verify that the descriptions of the pollutant sources identified in the stormwater pollution control program are accurate.*
 - **Pollutant Source Inspections:** As an active Facility, near-daily observations will be made by the pollution prevention team regarding the status of potential pollutant sources at the Facility. This SWPPP will be updated if new potential sources are identified and if existing potential sources are eliminated.
- *Verify that the stormwater pollutant controls (BMPs) being implemented are adequate.*
 - **BMP Inspections:** This verification will be made by comparing stormwater monitoring results to benchmark values (see Section 4.4) and through near-daily observations of Facility BMPs by the pollution prevention team and other Facility personnel. In addition, BMPs will be visually inspected monthly. The BMP visual inspections will be documented on the monitoring forms provided in Appendix C.
- *Update the site map to reflect current conditions.*

- The Site Map (Figure 2) will be updated as needed to show changes to the Facility that may impact stormwater discharges.
- *Include observations of the presence of floating materials, suspended solids, oil and grease, discoloration, turbidity, and odor in the stormwater discharges; in outside vehicle maintenance/repair areas; and liquid handling and storage areas. In areas where acid or alkaline materials are handled or stored, use a simple litmus or pH paper to identify those types of stormwater contaminants where needed. See procedures presented in Section 4.0 for conducting this inspection.*
 - **Stormwater Observations:** These observations will be made a part of the monthly visual monitoring as described in Section 4.1.1.
- *Determine whether there is/are unpermitted non-stormwater discharges to storm drains or receiving waters, such as process wastewater and vehicle/equipment washwater, and either eliminate or obtain a permit for such a discharge.*
 - **Unpermitted Non-stormwater Discharges:** This determination will be made as part of the monthly inspections described in Section 4. Monthly inspection forms will be maintained in Appendix D. Blank forms are also provided at the beginning of Appendix C. If Alaskan Copper identifies an unpermitted discharge, it will eliminate or obtain a permit for the discharge.

Recordkeeping BMPs require that the following reports be retained for five years:

- *Visual inspection reports (as described in Section 4.1.1), which should include: scope of the inspection, the personnel conducting the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP (performance of the BMPs, etc.), and actions taken to correct BMP inadequacies.*
 - **Recordkeeping:** Forms required as part of this SWPPP, including quarterly stormwater sampling forms and monthly inspection forms, will be maintained in Appendix D. Blank forms are also provided at the beginning of Appendix C.
- *Reports on spills of oil or hazardous substances in greater than reportable quantities (CFR Title 40 Parts 302.4 and 117), including the following: oil, gasoline, or diesel fuel that causes a violation of the State of Washington's Water Quality Standards, a film or sheen upon or discoloration of the waters of the state or adjoining shorelines, or a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.*
 - **Spill Event Recordkeeping:** Alaskan Copper will record any spill event on Worksheet 3 (Appendix D) and maintain that record for at least 5 years.

Additional records that must be kept by the pollution prevention team include the following:

- *Stormwater monitoring records (see Section 4.2).*
- *Employee training logs (see Section 3.1.5).*

Required records will be maintained in Appendix D of this SWPPP.

3.2 STRUCTURAL SOURCE CONTROL AND OPERATIONAL BEST MANAGEMENT PRACTICES BY INDUSTRIAL ACTIVITY (S3.B.4.b.ii)

This section describes structural source control BMPs and operational BMPs considered applicable in the 2019 Manual and used by the Facility for specific industrial activities within the Facility (treatment BMPs are also included for specific industrial activities where applicable). In addition, the specific

industrial activities listed below are also required by the Permit to include the following structural source control BMPs to minimize the exposure of manufacturing, processing, and material storage areas to precipitation and runoff:

- *Use grading, berming, or curbing to prevent runoff of contaminated flows and divert runoff away from manufacturing, processing, and material storage areas.*
- *Perform all cleaning operations indoors, under cover, or in bermed areas that prevent stormwater runoff and runoff and capture any overspray. Drain washwater to a collection system for further treatment or storage.*

3.2.1 BMPs FOR FUELING AT DEDICATED STATIONS

This section describes the applicable BMPs for fueling at dedicated stations.

General Description of Potential Pollutant Sources: *A fueling station is a facility dedicated to the transfer of fuels from a stationary pumping station to mobile vehicles or equipment. It includes above or under-ground fuel storage facilities. In addition to general service gas stations, fueling may also occur at 24-hour convenience stores, construction sites, warehouses, car washes, manufacturing establishments, port facilities, and businesses with fleet vehicles. Typically, stormwater contamination at fueling stations is caused by leaks/spills of fuels, lube oils, radiator coolants, and vehicle washwater.*

- **Applicability at Facility:** Alaskan Copper decommissioned their diesel tank in September 2019 near the northwest corner of Building 3405. Diesel fueling is no longer conducted at the facility. Propane fueling is conducted between the 3200 warehouse and maintenance shop in a designated area within the CSO drainage basin.

3.2.1.1 Operational BMPs for Fueling at Dedicated Stations

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Prepare an emergency spill response and cleanup plan (per BMPs for Spills of Oil and Hazardous Substances) and have designated trained person(s) available either on site or on call at all times to promptly and properly implement that plan and immediately cleanup all spills. Keep suitable cleanup materials, such as dry adsorbent materials, on site to allow prompt cleanup of a spill.*
 - **Spill Prevention and Cleanup:** See Section 3.1.4 for spill prevention and cleanup BMPs as part of the SPECP.
- *Train employees on the proper use of fuel dispensers. Post signs in accordance with the Uniform Fire Code (UFC). Post "No Topping Off" signs (topping off gas tanks causes spillage and vents gas fumes to the air). Make sure that the automatic shutoff on the fuel nozzle is functioning properly.*
- *The person conducting the fuel transfer must be present at the fueling pump during fuel transfer, particularly at unattended or self-serve stations.*
- *Keep drained oil filters in a suitable container or drum.*

3.2.1.2 Structural BMPs for Fueling at Dedicated Stations

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Design the fueling island to control spills (dead-end sump or spill control separator in compliance with the UFC), and to treat collected stormwater and/or wastewater to required levels. Slope the concrete containment pad around the fueling island toward drains; either trench drains, catch basins and/or a dead-end sump. The slope of the drains shall not be less than 1 percent (Section 7901.8 of the UFC). Drains to treatment shall have a shutoff valve, which must be closed in the event of a spill. The spill control sump must be sized in compliance with Section 7901.8 of the UFC; or*
- *Design the fueling island as a spill containment pad with a sill or berm raised to a minimum of four inches (Section 7901.8 of the UFC) to prevent the runoff of spilled liquids and to prevent run-on of stormwater from the surrounding area. Raised sills are not required at the open-grade trenches that connect to an approved drainage-control system.*
- *The fueling pad must be paved with Portland cement concrete, or equivalent. Asphalt is not considered an equivalent material.*
- *The fueling island must have a roof or canopy to prevent the direct entry of precipitation onto the spill containment pad. The roof or canopy should, at a minimum, cover the spill containment pad (within the grade break or fuel dispensing area) and preferably extend several additional feet to reduce the introduction of windblown rain. Convey all roof drains to storm drains outside of the fueling containment area.*
- *Stormwater collected on the fuel island containment pad must be conveyed to a sanitary sewer system, if approved by the sanitary authority; or to an approved treatment system such as an oil/water separator and a basic treatment BMP (Basic treatment BMPs are listed in Volume V and include media filters and biofilters). Discharges from treatment systems to storm drains or surface water or to the ground must not display ongoing or recurring visible sheen and must not contain greater than a significant amount of oil and grease. Alternatively, stormwater collected on the fuel island containment pad may be collected and held for proper off site disposal.*
- *Conveyance of any fuel-contaminated stormwater to a sanitary sewer must be approved by the local sewer authority and must comply with pretreatment regulations (WAC 173-216-060). These regulations prohibit discharges that could "cause fire or explosion." An explosive or flammable mixture is defined under state and federal pretreatment regulations, based on a flash point determination of the mixture. If contaminated stormwater is determined not to be explosive, then it could be conveyed to a sanitary sewer system.*
- *Transfer the fuel from the delivery tank trucks to the fuel storage tank in impervious contained areas and ensure that appropriate overflow protection is used. Alternatively, cover nearby storm drains during the filling process and use drip pans under all hose connections.*
- *If a roof or canopy is impractical the concrete fueling pad must be equipped with emergency spill control, which includes a shutoff valve for the drainage from the fueling area. The valve must be closed in the event of a spill. An electronically actuated valve is preferred to minimize the time lapse between spill and containment. Spills must be cleaned up and disposed off-site in accordance with BMPs for Spills of Oil and Hazardous Substances.*

- **Drainage of Fueling Area:** As indicated above, a roof is considered impractical. An emergency spill control shutoff valve is not currently provided at the fueling area. Alaskan Copper will further consider installing an emergency shutoff valve for this area.
- *The valve may be opened to convey contaminated stormwater to a sanitary sewer, if approved by the sewer authority, or to oil removal treatment such as an API or CP oil/water separator, catchbasin insert, or equivalent treatment, and then to a basic treatment BMP. Discharges from treatment systems to storm drains or surface water or to the ground must not display ongoing or recurring visible sheen and must not contain greater than a significant amount of oil and grease.*

3.2.2 BMPs FOR LOADING AND UNLOADING AREAS FOR LIQUID OR SOLID MATERIAL

This section describes the applicable BMPs for loading and unloading areas for liquid or solid material.

***General Description of Potential Pollutant Sources:** Loading/unloading of liquid and solid materials at industrial and commercial facilities is typically conducted at shipping and receiving, outside storage, fueling areas, etc. Transferred materials can include products, raw materials, intermediate products, waste materials, fuels, scrap metals, etc. Leaks and spills of fuels, oils, powders, organics, heavy metals, salts, acids, alkalis, etc. during transfer are potential causes of stormwater contamination. Spills from hydraulic line breaks are a common problem at loading docks.*

3.2.2.1 Operational BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *A significant amount of debris can accumulate at outside, uncovered loading/unloading areas. Sweep these surfaces frequently to remove material that could otherwise be washed away by stormwater. Sweep outside areas that are covered for a period of time by containers, logs, or other material after the areas are cleared.*
 - **Sweeping:** See Section 3.1.2.
- *Place drip pans, or other appropriate temporary containment device, at locations where leaks or spills may occur such as hose connections, hose reels, and filler nozzles. Drip pans shall always be used when making and breaking connections. Check loading/unloading equipment such as valves, pumps, flanges, and connections regularly for leaks and repair as needed.*
- *To minimize the risk of accidental spillage, prepare an Operations Plan that describes procedures for loading/unloading. Train the employees, especially forklift operators, in its execution and post it or otherwise have it readily available to employees.*
- *Report spills of reportable quantities to Ecology.*
- *Prepare and implement an Emergency Spill Cleanup Plan for the facility (BMP Spills of Oil and Hazardous Substances).*

3.2.2.2 Structural BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *At all loading/unloading areas: Consistent with Uniform Fire Code requirements (Appendix IV-D R.2) and to the extent practicable, conduct unloading or loading of solids and liquids in a manufacturing building, under a roof, or lean-to, or other appropriate cover.*
- *Berm, dike, and/or slope the loading/unloading area to prevent run-on of stormwater and to prevent the runoff or loss of any spilled material from the area.*
- *Large loading areas frequently are not curbed along the shoreline. As a result, stormwater passes directly off the paved surface into surface water. Place curbs along the edge or slope the edge such that the stormwater can flow to an internal storm drain system that leads to an approved treatment BMP.*
- *Pave and slope loading/unloading areas to prevent the pooling of water. The use of catch basins and drain lines within the interior of the paved area must be minimized as they will frequently be covered by material, or they should be placed in designated "alleyways" that are not covered by material, containers, or equipment.*

3.2.3 BMPs FOR MAINTENANCE OF STORMWATER DRAINAGE AND TREATMENT SYSTEMS

This section describes the operational BMPs for maintenance of stormwater drainage and treatment systems.

General Description of Pollutant Sources: *Facilities include roadside catch basins on arterials and within residential areas, conveyance systems, detention facilities such as ponds and vaults, oil and water separators, biofilters, settling basins, infiltration systems, and all other types of stormwater treatment systems presented in Volume V (of the Stormwater Management Manual). Roadside catch basins can remove from 5 to 15 percent of the pollutants present in stormwater. When catch basins are about 60 percent full of sediment, they cease removing sediments. Oil and grease, hydrocarbons, debris, heavy metals, sediments and contaminated water are found in catch basins, oil and water separators, settling basins, etc.*

- **Applicability at Facility:** The Facility maintains catch basins and stormwater conveyance piping as required.

3.2.3.1 Operational and Structural BMPs

The following BMPs are adhered to at the Facility, unless noted otherwise.

- *Inspect and clean treatment BMPs, conveyance systems, and catch basins as needed, and determine whether improvements in operations and maintenance (O&M) are needed.*
 - **Catch Basins:** The facility has 15 catch basins that ultimately discharge to stormwater. Catch basin inserts are installed in all facility catch basins. Catch basins are inspected during the monthly inspections for sediment accumulation and integrity of the catch basin insert. Additional catch basins within the facility discharges to the combined sanitary sewer. Notes are to be recorded on the monthly inspection form if O&M improvements are needed.

- *Promptly repair any deterioration threatening the structural integrity of the facilities. These include replacement of cleanout gates, catch basin lids, and rock in emergency spillways.*
 - **Storm Drain Blockage:** If catch basins or storm drains are observed to not drain properly and contribute to turbidity and suspended solids, then inspect drain lines for debris or sediment blockage or broken piping. Clean and repair or replace storm drain lines as necessary to restore proper drainage.
- *Ensure that storm sewer capacities are not exceeded and that heavy sediment discharges to the sewer system are prevented.*
- *Regularly remove debris and sludge from structural BMPs used for peak-rate control, treatment, etc., and discharge to a sanitary sewer, if approved by the sewer authority, or truck to a local or state government-approved disposal site.*
- *Clean catch basins when the depth of deposits reaches 60 percent of the sump depth as measured from the bottom of the basin to the invert of the lowest pipe into or out of the basin. However, in no case should there be less than 6 inches clearance from the debris surface to the invert of the lowest pipe. Some catch basins (for example, Washington State Department of Transportation Type 1L basins) may have as little as 12 inches sediment storage below the invert. These catch basins will need more frequent inspection and cleaning to prevent scouring. Where these catch basins are part of a stormwater collection and treatment system, the system owner/operator may choose to concentrate maintenance efforts on downstream control devices as part of a systems approach.*
 - **Catch Basins:** Facility catch basins are cleaned out as described above. Catch basin solids cleanout is typically done annually, which ends up being more often than needed to maintain solids levels below that indicated above.
- *Clean woody debris in a catch basin as frequently as needed to ensure proper operation of the catch basin.*
- *Post warning signs; "Dump No Waste – Drains to Groundwater," "Streams," "Lakes," or emboss on or adjacent to all storm drain inlets where practical.*
- *Disposal of sediments and liquids from the catch basins must comply with "Recommendations for Management of Street Wastes" from Appendix IV-G of the Stormwater Management Manual for Western Washington, available online at: <http://www.ecv.wa.gov/pubs/9914.pdf>.*

3.2.4 BMPs FOR ROOF/BUILDING DRAINS AT MANUFACTURING BUILDINGS

This section describes the operational BMPs for roof/building drains at manufacturing and commercial buildings.

General Description of Pollutant Sources: *Stormwater runoff from roofs and sides of manufacturing and commercial buildings can be sources of pollutants caused by leaching of roofing materials, building vents, and other air emission sources. Vapors and entrained liquid and solid droplets/particles have been identified as potential pollutants in roof/building runoff. Metals, solvents, acidic/alkaline pH, BOD, and organics, are some of the pollutant constituents identified.*

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *If leachate and/or emissions from buildings are suspected sources of stormwater pollutants, then sample and analyze the stormwater draining from the building. If a roof/building*

stormwater pollutant source is identified, implement appropriate source control measures such as air pollution control equipment, selection of materials, operational changes, material recycle, process changes, etc.

- **Stormwater filters have been provided at select roof drain downspouts in the past. See also, emphasis on environmentally acceptable material (i.e., not containing leachable copper or zinc) in Section 3.1.5.**

3.2.5 BMPs FOR STORAGE OF LIQUIDS OR DANGEROUS WASTE CONTAINERS (OUTSIDE)

This section describes the BMPs required for Storage of Liquids, Food Wastes, or Dangerous Waste Containers (Outside).

General Description of Potential Pollutant Sources. *Steel and plastic drums with volumetric capacities of 55 gallons or less are typically used at industrial facilities for container storage of liquids and powders. The BMPs specified below apply to container(s) located outside a building used for temporary storage of accumulated food wastes, vegetable or animal grease, used oil, liquid feedstock or cleaning chemical, or Dangerous Wastes (liquid or solid) unless the business is permitted by Ecology to store the wastes. Leaks and spills of pollutant materials during handling and storage are the primary sources of pollutants. Oil and grease, acid/alkali pH, BOD, COD are potential pollutant constituents.*

- **Applicability at Alaskan Copper:** There is no storage of liquids, food waste, or dangerous waste containers in containers stored outdoors within the identified stormwater drainage area. BMPs are provided in this section in the event that temporary storage of liquids or dangerous wastes may need to occur in the future.

3.2.5.1 Operational BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Place tight-fitting lids on all containers.*
- *Place drip pans beneath all mounted container taps and at all potential drip and spill locations during filling and unloading of containers.*
- *Inspect container storage areas regularly for corrosion, structural failure, spills, leaks, overfills, and failure of piping systems. Check containers daily for leaks/spills. Replace containers, and replace and tighten bungs in drums as needed.*
- *Businesses accumulating Dangerous Wastes that do not contain free liquids need only to store these wastes in a sloped designated area with the containers elevated or otherwise protected from storm water run-on.*
- *Drums stored in an area where unauthorized persons may gain access must be secured in a manner that prevents accidental spillage, pilferage, or any unauthorized use.*
- *Storage of reactive, ignitable, or flammable liquids must comply with the Uniform Fire Code.*
- *Cover dumpsters, or keep them under cover such as a lean-to, to prevent the entry of stormwater. Replace or repair leaking garbage dumpsters.*
- *Drain dumpsters and/or dumpster pads to sanitary sewer. Keep dumpster lids closed. Install waterproof liners.*

3.2.5.2 Structural BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Keep containers with Dangerous Waste, food waste, or other potential pollutant liquids inside a building unless this is impracticable due to site constraints or Uniform Fire Code requirements.*
- *Store containers in a designated area, which is covered, bermed or diked, paved and impervious in order to contain leaks and spills. The secondary containment shall be sloped to drain into a dead-end sump for the collection of leaks and small spills.*
- *For liquid wastes, surround the containers with a dike. The dike must be of sufficient height to provide a volume of either 10 percent of the total enclosed container volume or 110 percent of the volume contained in the largest container, whichever is greater, or, if a single container, 110 percent of the volume of that container.*
- *Where material is temporarily stored in drums, a containment system can be used.*
- *Place containers mounted for direct removal of a liquid chemical for use by employees inside a containment area as described above. Use a drip pan during liquid transfer.*
- *Include a tank overfill protection system to minimize the risk of spillage during loading.*

3.2.6 BMPs FOR STORAGE OF LIQUIDS IN PERMANENT ABOVEGROUND TANKS

This section describes the operational, structural, and treatment BMPs for the storage of liquids in permanent aboveground storage tanks.

General Description of Pollutant Sources: Above-ground tanks containing liquids (excluding uncontaminated water) may be equipped with a valved drain, vent, pump, and bottom hose connection. They may be heated with steam heat exchangers equipped with steam traps. Leaks and spills can occur at connections and during liquid transfer. Oil and grease, organics, acids, alkalis, and heavy metals in tank water and condensate drainage can also cause stormwater contamination at storage tanks.

3.2.6.1 Operational BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Inspect the tank containment areas regularly to identify problem components such as fittings, pipe connections, and valves, for leaks/spills, cracks, corrosion, etc.*
- *Place adequately sized drip pans beneath all mounted taps and drip/spill locations during filling/unloading of tanks. Valved drain tubing may be needed in mounted drip pans.*
- *Sweep and clean the tank storage area regularly, if paved.*
- *Replace or repair tanks that are leaking, corroded, or otherwise deteriorating.*
- *All installations shall comply with the Uniform Fire Code and the National Electric Code.*

3.2.6.2 Structural BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Locate permanent tanks in impervious (Portland cement concrete or equivalent) secondary containment areas surrounded by dikes or UL-approved double-walled tanks. The dike must be of sufficient height to provide a containment volume of either 10 percent of the total enclosed tank volume or 110 percent of the volume contained in the largest tank, whichever is greater, or, if a single tank, 110 percent of the volume of that tank.*
- *Slope the secondary containment to drain to a dead-end sump (optional), or equivalent, for the collection of small spills.*
- *Include a tank overfill protection system to minimize the risk of spillage during loading.*

3.2.6.3 Treatment BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *If the tank containment area is uncovered, equip the outlet from the spill-containment sump with a shutoff valve, which is normally closed and may be opened, manually or automatically, only to convey contaminated stormwater to approved treatment or disposal, or to convey uncontaminated stormwater to a storm drain. Evidence of contamination can include the presence of visible sheen, color, or turbidity in the runoff, or existing or historical operational problems at the facility. Simple pH measurements with litmus or pH paper can be used for areas subject to acid or alkaline contamination.*

3.3 TREATMENT BEST MANAGEMENT PRACTICES (S3.B.4.b.iii)

Two above ground treatment systems are installed at ACW. One for all industrial stormwater basins east of 6th Ave S that discharge to the MS4, located just south of the 3200 warehouse (2018 system). One for the industrial stormwater basin (DP10) that discharges to the MS4, located just west of the 3405 admin building (2019 system). Additionally, ACW maintains catch basin inserts at all drainage inlets to reduce the amount of solids and oils being routed to the treatment systems.

There are three lift stations west of 6th Ave S. that route stormwater to the 2018 treatment system. The treatment system is composed of pH adjustment to aid in precipitation of dissolved metals, settling in a 10,000 gallon holding tank and a second 10,000 gallon holding tank for the treatment pump to draw off of. Water is then pumped through 5-micron bag filters (10-micron when 5-micron bags are not available), followed by a lead/lag GAC system as described in the 2018 engineering report. The system and lift stations are inspected at least monthly, but more frequently during rainy weeks. An O&M manual is available for the treatment system and is located in the 628 maintenance shop.

There is one lift station east of 6th Ave S. that routes stormwater to the 2019 treatment system. Water is pumped to an above ground oil/water separate that provides solids settling prior to being passed through six media vessels in parallel. The media used in the vessels is APTsorbII, a granular activated peat that reduces heavy metals and particulate from the stormwater prior to discharge. The system is further described in the 2019 engineering report. Ecology requested additional sampling and submittal of performance data in spring 2020 before giving final approval. An O&M manual will be developed at that time.

3.4 STORMWATER PEAK RUNOFF AND VOLUME CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.iv)

The Alaskan Copper Facility is believed to have been constructed in accordance with stormwater drainage rules in effect at the time of construction or Facility expansions. The receiving waters for stormwater runoff from the Facility that does not drain to the combined sanitary sewer system is the lower Duwamish Waterway, which is a large water bodies that are not subject to flow control limitations. Alaskan Copper does not maintain peak runoff and volume control BMPs beyond the existing catch basin storm drain network.

3.5 EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.v)

BMP options for soil erosion and sediment control at industrial sites are listed below:

- *Plant vegetative cover, such as grass, trees, and shrubs, on erodible soil areas. Cover with mats, such as clear plastic, jute, and synthetic fiber. Preserve natural vegetation, including grass, trees, shrubs, and vines.*
- *Maintain vegetated swale, dike, silt fence, check dam, gravel filter berm, sedimentation basin, and proper grading.*
 - **Soil Erosion and Sediment Control:** Alaskan Copper does not perform industrial activities on unpaved areas.

4.0 STORMWATER MONITORING PLAN (S3.B.5)

The Permit requires each facility to conduct and document visual inspections of the site and to sample and test representative stormwater discharges at least once per quarter. Specific stormwater monitoring requirements are presented below. Eight consecutive quarters of meeting benchmark value for a parameter is required to achieve consistent attainment. After achieving consistent attainment for a parameter, sampling for that parameter is only required during the first flush sample after September 1 of each year for a period of three years.

4.1 MONITORING LOCATIONS, REQUIREMENTS, AND METHODS

In accordance with Permit Condition S7, qualified personnel are to conduct and document a visual inspection of the site each month. Each inspection shall include observations made at locations where stormwater associated with industrial activity is discharged off site to waters of the state or to a storm sewer system that drains to waters of the state. For the Alaskan Copper Facility, those locations are identified in the updated facility map. The results of each inspection are to be recorded on the Monthly Inspection Form (Appendix D), and these completed forms are to be kept on site for Ecology review.

The ISGP requires that stormwater samples be collected and tested quarterly from location(s) that are representative of stormwater being discharged from the facility. All stormwater associated with drainage basins that have industrial activity and discharge to the MS4 are routed through treatment systems and have two discrete outfalls (DP03 and DP10). Sampling of stormwater must be performed according to the following Permit criteria:

- Sampling of the stormwater discharge is to be conducted at least once per quarter:
 - 1st Quarter = January, February, and March
 - 2nd Quarter = April, May, and June
 - 3rd Quarter = July, August, and September
 - 4th Quarter = October, November, and December
- Sample the stormwater discharge from the “first flush” storm event is considered to be the first rainfall that produces runoff after September 1 of each year. Additionally, if a parameter is in consistent attainment, the “first flush” sample must still be obtained each year for each parameter.
- Collect samples within the first 12 hours of stormwater discharge events. If it is not possible to collect a sample within the first 12 hours of a stormwater discharge event, Facility personnel must collect the sample as soon as practicable after the first 12 hours and keep documentation with the sampling records explaining why sampling could not occur within the first 12 hours.
- Sampling need not be performed outside of regular business hours, during unsafe conditions (e.g., during thunderstorms), or during quarters where there is no discharge.

To efficiently comply with these criteria (especially the first fall sampling event), attention must be paid to weather forecasts in order to anticipate when stormwater discharge will first occur at the designated discharge location.

4.1.1 METHODS FOR VISUAL INSPECTIONS

Visual inspections include assessments of BMPs, and observations for the presence of non-permitted stormwater discharges, floating materials, visible sheen, discoloration, turbidity, or odor in the stormwater discharge at the sampling point. Visual inspection results will be recorded on the monthly inspection form provided at the beginning of Appendix C. These completed forms, referred to in the Permit as visual inspection reports, must be signed by the person making the observations as well as by Alaskan Copper's Responsible Official or other duly authorized representative of the Facility (as described in Condition G.2a of the Permit). The form includes a certification that the Facility is in compliance or non-compliance with the SWPPP and the Permit. If the Facility inspection indicates that the requirements of the SWPPP or the Permit are not being met, the monthly inspection form must include a summary of the actions that will be taken to meet these requirements. See Section S9.E of the Permit for instructions on reporting incidents of non-compliance.

4.1.2 METHODS FOR STORMWATER SAMPLING

Stormwater samples will be collected from the designated sampling locations on the discharge side of each treatment system. This will be done by opening the sample port valve, letting it flush for at least 15 seconds and then collecting the required grab samples. Additional sampling protocols are listed on pages 9 and 10 of the Ecology guidance on sampling, accessible through the following link: (<http://www.ecy.wa.gov/pubs/0210071.pdf>).

According to the Permit requirements for this type of industrial facility, stormwater will be sampled once per quarter for the parameters listed below in table 2.

Table 2. Parameters required to be sampled quarterly by ACW

| Parameter | Units | Container | Preservative | Analytical Method (Holding time) | Benchmark Value | Laboratory Quantification Level |
|-----------|-------|------------------------------|--|---|--------------------|---------------------------------------|
| Turbidity | NTU | 500mL polyethylene bottle | None if field meter, or cool to 4°C if not brought directly to lab | Field meter or meter in lab. EPA 180.1 (48 hours) | 25 NTU | 0.5 |
| pH | SU | Disposable cup | None, measure immediately | Meter or pH paper in field. pH paper within +/- 0.5 SU or less. Measure immediately. | 5-9 SU | +/- 0.5 |

| | | | | | | |
|------------------------------|--------|---|--|-------------------------------------|----------------------|-----|
| Oil Sheen | Yes/No | N/A | N/A | N/A | No visible oil sheen | N/A |
| Total Copper | µg/L | 500 mL polyethylene bottle with acid preservative | Acid, cool to 4°C if not brought directly to lab | EPA Method 200.8 in lab (6 months) | 14 µg/L | 2.0 |
| Total Zinc | µg/L | 500 mL polyethylene bottle with acid preservative | Acid, cool to 4°C if not brought directly to lab | EPA Method 200.8 in lab (6 months) | 117 µg/L | 2.5 |
| Total Lead | µg/L | 500 mL polyethylene bottle with acid preservative | Acid, cool to 4°C if not brought directly to lab | EPA Method 200.8 in lab (6 months) | 81.6 µg/L | 0.5 |
| Total Suspended Solids (TSS) | mg/L | 1 liter HDPE | N/A | 303(d)/Puget Sound Sediment Cleanup | 30 mg/L | 5 |
| Petroleum Hydrocarbons | mg/L | Two 500 mL amber glass bottles | None, cool to 4°C if not brought directly to lab | NWTPH-Dx | 10 mg/L | 0.1 |

NTU = nephelometric turbidity unit
 mL = milliliter
 mg/L = milligrams per liter
 µg/L = microgram per liter
 SU = standard unit
 EPA = U.S. Environmental Protection Agency
 N/A = not applicable

This Facility is now listed in Appendix 4 of the Industrial Stormwater General Permit [which is the list of permittees that discharge pollutants of concern to a 303(d)-listed water body]. Therefore, this Facility needs to sample for total suspended solids (TSS) as included in the table above. A copy of the Permit coverage letter from Ecology, which clarifies sampling requirements, is provided in Appendix B.

Sampling requires filling appropriate containers as described above. The laboratory can provide a cooler with all the necessary sample collection jars upon request. It is recommended that a cooler with collection jars be kept on site ahead of time in preparation for qualifying rain events. The Permittee has the option of measuring pH and/or turbidity in the field with either an appropriate meter or combination of pH paper and turbidity meter. The pH can be measured by inserting a strip of pH paper (provided by the laboratory) into a disposable cup for 2 to 10 minutes and comparing the strip to the color chart. Record the result in the field notebook. If the permittee does not have appropriate field meters, the laboratory is able to analyze all necessary sampling parameters.

After filling the sample bottles with stormwater from the sample location, put the bottles into the cooler supplied by the laboratory and add ice or blue ice to cool the samples if the samples are not brought directly to laboratory. Samples from catch basins are currently labeled according to the designation listed in Section 4.4.

4.2 RECORDKEEPING

Records required to be retained include the information recorded in the field during stormwater monitoring and the laboratory reports provided by the laboratory. All of the information to be recorded in the field is summarized on the Quarterly Stormwater Sampling form and Monthly Inspection form located in Appendix D. These forms, along with the laboratory data, should be kept in the recordkeeping section of this SWPPP (Appendix D). Older copies of Discharge Monitoring Reports (DMRs), explained in Section 4.1.1, and Annual Reports should be kept in Appendix D. Starting in 2015, all DMRs and Annual Reports are submitted online through the Secure Access Washington website, and those records are retained online. Field forms and laboratory reports must be retained for at least 5 years, according to the Permit. Blank forms for quarterly stormwater sampling and monthly inspections are provided at the beginning of Appendix C.

4.3 SUBMITTAL OF SAMPLES TO THE LABORATORY

Stormwater samples should be submitted to an accredited laboratory. Alaskan Copper currently uses Analytical Resources, Inc., which is located at:

Analytical Resources, Inc.
4611 South 134th Pl
Tukwila, Washington 98168
(206-695-6200)

The sample bottles must be labeled and the chain-of-custody (COC) form must be completed. The stormwater sample bottles should be packed in the cooler on ice if not brought directly to the laboratory. If the cooler will leave the sampler's possession before arriving at the laboratory, place the completed COC form inside a Zip-loc bag and inside the cooler, then seal the cooler and bring the cooler to the laboratory. If the turbidity is not measured with a field meter, the sample must be brought to the laboratory as soon as possible because the sample's turbidity level needs to be analyzed by the laboratory within 48 hours of sample collection.

4.4 EVALUATION OF SAMPLING RESULTS

The stormwater sampling results must be submitted to Ecology on a quarterly basis (see Section 4.1); the stormwater sampling results must also be compared to the benchmark values shown in Section 4.1.2 to assess the effectiveness of the current BMPs in preventing pollutants from entering stormwater. Values at or below benchmark values are considered unlikely to cause a water quality violation and consistent attainment of benchmark values over eight consecutive quarters suspends the need to conduct further stormwater sampling for a particular parameter for three years, except the "first flush" sample

(unless significant process changes take place at the Facility). Therefore, no additional action is needed if sampling results are below benchmark values, with the exception that monthly inspections must continue and DMRs still need to be submitted indicating that consistent attainment has been achieved.

Unlike exceedances of effluent limits, exceedance of benchmark values does not constitute a violation of the Permit because benchmark values are not water quality standards and are not Permit limits. However, it is an indicator that additional measures should be taken to reduce the entry of pollutants into stormwater at the Facility. These response measures range from implementing additional operational BMPs (Level One Corrective Action) to implementing stormwater treatment BMPs (Level Three Corrective Action). These Permit-required corrective actions and the criteria that trigger them are presented below.

Level One Corrective Actions – Operational Source Control BMPs

| |
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| Permittees that exceed any applicable benchmark value(s) shall complete a Level 1 Corrective Action for each parameter exceeded in accordance with the following: |
| <ol style="list-style-type: none"> 1. Within 14 days of receipt of sampling results that indicate a benchmark exceedance for a given quarter 7; or, for parameters other than pH or visible oil sheen, the end of the quarter, whichever is later: <ol style="list-style-type: none"> a. Conduct an inspection to investigate the cause. b. Review the SWPPP and ensure that it fully complies with Permit Condition S3, and contains the correct BMPs from the applicable <i>Stormwater Management Manual</i>. c. Make appropriate revisions to the SWPPP to include additional Operational Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. 2. Summarize the Level 1 Corrective Actions in the Annual Report (Condition S9.B). 3. Level One Deadline: The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable <i>Stormwater Management Manual</i> as soon as possible, but no later than the DMR due date for the quarter the benchmark was exceeded. |

Level Two Corrective Actions – Structural Source Control BMPs

| |
|--|
| Permittees that exceed an applicable <i>benchmark</i> value (for a single parameter) for any two quarters during a calendar year shall complete a Level 2 Corrective Action in accordance with S8.C. Alternatively, the permittee may skip Level 2 and complete a Level 3 Corrective Action in accordance with Condition S8.D. |
| <ol style="list-style-type: none"> 1. Review the SWPPP and ensure that it fully complies with Permit Condition S3. 2. Make appropriate revisions to the SWPPP to include additional Structural Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. 3. Summarize the Level 2 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B). 4. Level 2 Deadline: The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable <i>Stormwater Management Manual</i> as soon as possible, but no later than August 31st the following year.* <ol style="list-style-type: none"> a. If installation of necessary Structural Source Control BMPs is not feasible by August 31st the following year, Ecology may approve additional time, by approving a Modification of Permit Coverage. b. If installation of Structural Source Control BMPs is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, Ecology may waive the requirement for additional Structural Source Control BMPs by approving a Modification of Permit Coverage. c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to Ecology in accordance with Condition S2.B, by May 15th prior to the Level 2 Deadline. Ecology will approve or deny the request within 60 days of receipt of a complete Modification of Coverage request. d. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions. e. For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions. |

Level Three Corrective Actions – Treatment BMPs

Permittees that exceed an applicable benchmark value (for a single parameter) for any three quarters during a calendar year shall complete a Level 3 Corrective Action in accordance with S8.D. A Level 2 Corrective Action is not required.

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3.

2. Make appropriate revisions to the SWPPP to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. Revisions shall include additional operational and/or structural source control BMPs if necessary for proper performance and maintenance of Treatment BMPs.

A Qualified Industrial Stormwater Professional shall review the revised SWPPP, sign the SWPPP Certification Form, and certify that it is reasonably expected to meet the ISGP benchmarks upon implementation. Upon written request Ecology may, one time during the permit cycle, waive this requirement on a case-by-case basis if a Permittee demonstrates to Ecology's satisfaction that the proposed Level 3 treatment BMPs are reasonably expected to meet ISGP benchmarks upon implementation.

3. Before installing treatment BMPs that require the site-specific design or sizing of structures, equipment, or processes to collect, convey, treat, reclaim, or dispose of industrial stormwater, the Permittee shall submit an engineering report to Ecology for review.

a. The engineering report must include:

- i. Brief summary of the treatment alternatives considered and why the proposed option was selected. Include cost estimates of ongoing operation and maintenance, including disposal of any spent media;
- ii. The basic design data, including characterization of stormwater influent, and sizing calculations of the treatment units;
- iii. A description of the treatment process and operation, including a flow diagram;
- iv. The amount and kind of chemicals used in the treatment process, if any. Note: Use of stormwater treatment chemicals requires submittal of Request for Chemical Treatment Form;
- v. Results to be expected from the treatment process including the predicted stormwater discharge characteristics;
- vi. A statement, expressing sound engineering justification through the use of pilot plant data, results from similar installations, and/or scientific evidence that the proposed treatment is reasonably expected to meet the permit benchmarks; and
- vii. Certification by a licensed professional engineer.

b. The engineering report shall be submitted no later than the May 15th prior to the Level 3 deadline, unless an alternate due date is specified in an order.

c. An Operation and Maintenance Manual (O&M Manual) shall be submitted to Ecology no later than 30 days after construction/installation is complete; unless an alternate due date is specified in an order.

4. Summarize the Level 3 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B). Include information on how monitoring, assessment or evaluation information was (or will be) used to determine whether existing treatment BMPs will be modified/enhanced, or if new/additional treatment BMPs will be installed.

5. **Level 3 Deadline:** The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable Stormwater Management Manual as soon as possible, but no later than September 30th the following year.

a. If installation of necessary Treatment BMPs is not feasible by the Level 3 Deadline, Ecology may approve additional time by approving a Modification of Permit Coverage.

b. If installation of Treatment BMPs is not feasible or not necessary to prevent discharges that may cause or contribute to violation of a water quality standard, Ecology may waive the requirement for Treatment BMPs by approving a Modification of Permit Coverage.

c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to Ecology in accordance with Condition S2.B, by May 15th prior to the Level 3 Deadline. Ecology will approve or deny the request within 60 days of receipt of a complete Modification of Coverage request.

d. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

e. For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

Facilities that continue to exceed benchmarks after a Level 2 (or Level 3) Corrective Action is triggered, but prior to the Level 2 (or Level 3) Deadline, are not required to complete another Level 2 or 3 Corrective Action the following year for the same parameter. However, a Level 1 Corrective Action is required each time a benchmark is exceeded.

Finally, the results of all visual inspection data should be used to determine if action is needed to respond to the observation of visible pollutants. Response actions may include cleanup of the observed

condition and/or investigation of the source of the condition. These response actions must be documented in the monthly inspection form.

The laboratory results from the Appendix D stormwater sampling data are maintained in a separate spreadsheet database for comparison to benchmarks. The data are reviewed to track BMP effectiveness, whether benchmark concentrations are exceeded, and whether the required corrective actions in the Permit are triggered.

4.5 SUBMITTING THE SAMPLING RESULTS TO ECOLOGY

Monitoring results must be submitted quarterly to Ecology electronically using Ecology's Water Quality Permitting Portal – DMR application (also called WebDMR). DMRs may be submitted any time after completing the required monitoring each quarter but must be filed electronically with Ecology as follows:

| | |
|-----------------|----------------------------|
| First Quarter: | Not later than May 15 |
| Second Quarter: | Not later than August 15 |
| Third Quarter: | Not later than November 15 |
| Fourth Quarter: | Not later than February 15 |

DMR forms must be submitted quarterly whether or not the facility was discharging stormwater. If there was no discharge during a given monitoring period, the DMR must still be submitted by marking the "no discharge" check box, along with an explanation. If sampling has been suspended for a parameter due to consistent attainment, note on the DMR submittal that Consistent Attainment has been achieved for that parameter(s).

In addition, a complete and accurate Annual Report is to be submitted to the Department of Ecology no later than May 15th of each year using Ecology's Water Quality Permitting Portal – Permit Submittals application. The annual report shall include corrective action documentation as required in S8.B-D. If corrective action is not yet completed at the time of submission of the annual report, the Permittee must describe the status of any outstanding corrective action(s). Permittees shall retain a copy of all annual reports on site for Ecology review and shall include the following information with each annual report:

- Identify the condition triggering the need for corrective action review.
- Describe the problem(s) and identify the dates they were discovered.
- Summarize any Level 1, 2, or 3 corrective actions completed during the previous calendar year and include the dates it completed the corrective actions.
- Describe the status of any Level 2 or 3 corrective actions triggered during the previous calendar year, and identify the date it expects to complete corrective actions.

For questions about the Industrial Stormwater General Permit or DMR submittals, Clay Keown at Ecology is an available contact person (360) 407-6048 or ckeo461@ecy.wa.gov).

APPENDIX A. FIGURES

Figure 1: Vicinity Map

Figure 2: Site Map – Drainage Basins and Potential Contaminant Sources

Figure 3: Building 3405 Drainage Basins and 2019 Modifications

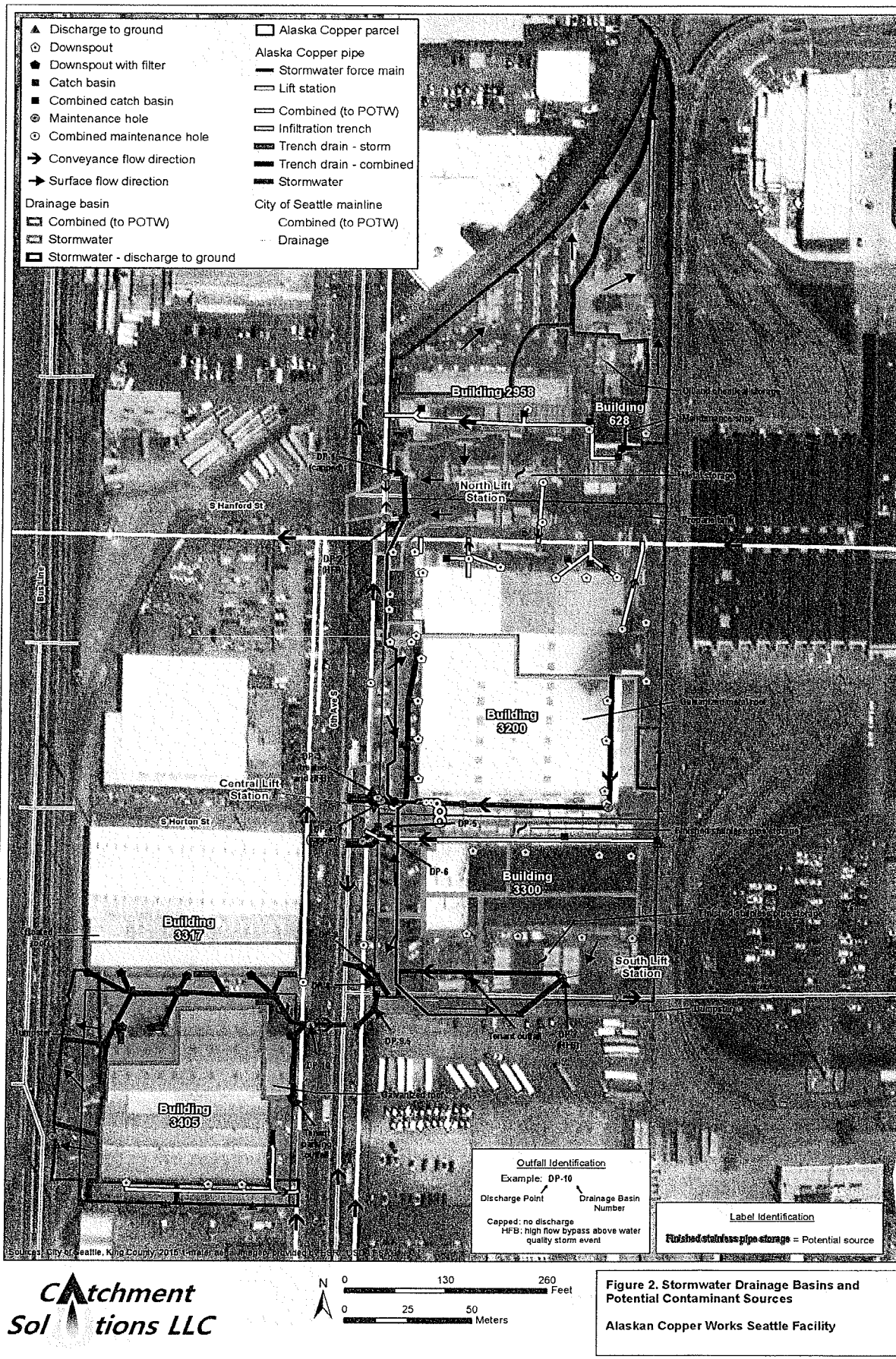
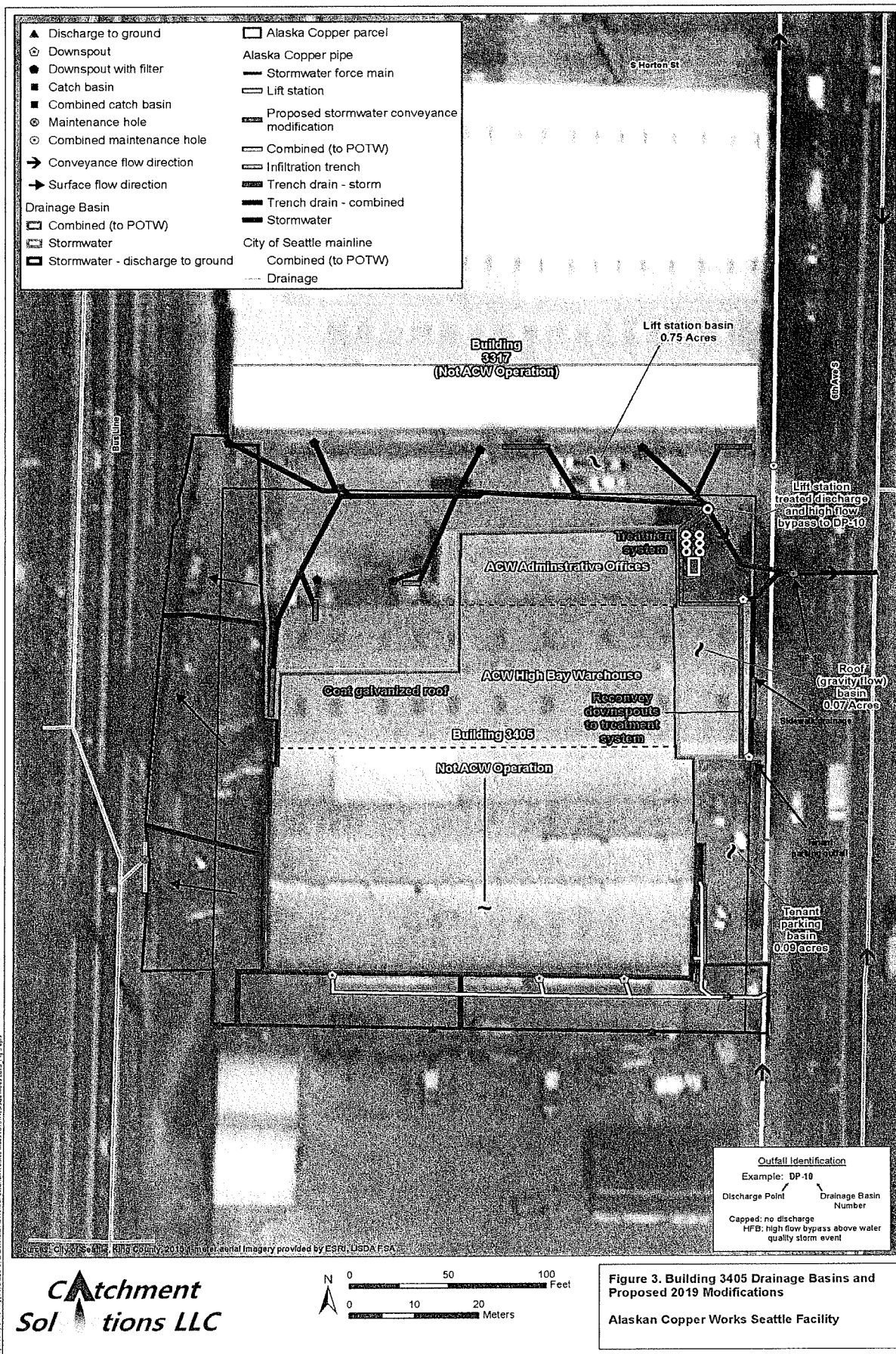


Figure 2. Stormwater Drainage Basins and Potential Contaminant Sources
 Alaskan Copper Works Seattle Facility



APPENDIX B. ECOLOGY PERMIT COVERAGE LETTER AND INDUSTRIAL STORMWATER GENERAL PERMIT



Cap V.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000

711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

December 30, 2019

William Rosen
Alaskan Copper Works
PO Box 3546
Seattle, WA 98124-3546

WAR000139

Alaskan Copper Works
3200 6TH AVE S
SEATTLE, WA 98134

RE: Reissuance of the Industrial Stormwater General Permit

Dear Mr. William Rosen:

On November 20, 2019, the Department of Ecology (Ecology) reissued the Industrial Stormwater National Pollutant Discharge Elimination System and State Waste Discharge General Permit (permit). The permit becomes effective on January 1, 2020, and expires on December 31, 2024. A mobile friendly copy of the permit, permit forms, and information related to your permit can be viewed and downloaded at www.ecology.wa.gov/ISGPeCoverage-packet. **Retain this letter with your permit and Stormwater Pollution Prevention Plan. It is the official record of permit coverage for your facility.**

Permit Overview: The new permit has a number of changes. The changes are summarized in the fact sheet. You can find more information on Ecology's website at: <https://ecology.wa.gov/industrialstormwaterpermit>. Please contact Ecology if you have any questions.

Site Specific Monitoring Requirements: Your monitoring requirements may be viewed by logging in to WebDMR and viewing your first DMR. If you believe there is a discrepancy between what the permit requires and the DMR, please contact Ecology immediately. In the case of a difference between the permit as applied to your facility and the DMR, the permit requirements take precedence.

Copies of the Permit: You may download copies of the final permit, Fact Sheet, Response to Comments, and other supporting documents online at <https://ecology.wa.gov/industrialstormwaterpermit>. You may also request copies from Dena Jaskar at (360) 407-6401 or by email at dena.jaskar@ecy.wa.gov.

Appeal of Permit Coverage

You have a right to appeal coverage under the general permit to the Pollution Control Hearings Board (PCHB). Appeals must be filed within 30 days of the date of receipt of this letter. Any appeal is limited to the general permit's applicability or non-applicability to a specific discharge. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

Included is a Focus Sheet describing where and how to appeal this permit coverage. The Focus Sheet may also be accessed at <https://fortress.wa.gov/ecy/publications/SummaryPages/1710007.html>.

For Additional Information or Assistance

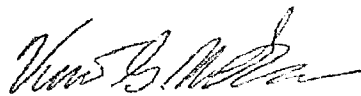
Ecology is committed to providing assistance to you. Please review our web page at <https://ecology.wa.gov/industrialstormwaterpermit>. For questions about transfers, terminations, and other administrative issues, please contact Josh Klimek at jokl461@ecy.wa.gov or (360) 407-7451.

If you have questions regarding stormwater management issues at your site, please contact Ben Billick at bbil461@ecy.wa.gov or (425) 649-7059.

Questions

If you have questions regarding the permit, please contact Travis Porter at (360) 407-6127, or Travis.Porter@ecy.wa.gov.

Sincerely,



Vincent McGowan, P.E. , Manager

Program Development Services Section
Water Quality Program

APPENDIX C. BLANK SWPPP FORMS



Industrial Stormwater General Permit Annual Report Form

| |
|----------------------|
| Permit No. WAR-_____ |
| Site Name: _____ |
| Site County: _____ |

Use this form to submit your annual report to Ecology. This form is not protected. Use your F11 key to maneuver through the fields. Attach corrective action documentation, and/or additional sheets if necessary. All facilities must submit a signed annual report each year on or before May 15th. Retain a copy of your submitted report onsite for Ecology review.

1. Benchmarks Exceeded

This report is based on samples collected during calendar year 20____.

Did you exceed the benchmark for any parameter during the above noted calendar year (Jan 1st – Dec 31st)?

Note: If you sampled a parameter (other than pH or visible oil sheen) at a discharge point more than once during a quarter, the average of the sample results must be compared to the benchmark.

Yes ☐ - Complete Sections 2 and 3 and sign and submit the form as described in Section 4.

No ☐ - Complete Section 2, skip Section 3, and sign and submit the form as described in Section 4.

Include any additional comments here:

2. Stormwater Problems Identified At the Facility

Instructions: Based on the best available information, briefly describe any potential or actual stormwater pollution problem(s) you identified during the previous calendar year (Jan 1st – Dec 31st).

- Sources of available information may include (but may not be limited to): SWPPP reviews, audits made by consultants or providers of technical assistance, inspection reports or other notification made by federal/state/local authorities, visual observations, and/or your facility's monthly site inspections (self-inspections).
- For each problem identified, provide the date you discovered the problem (estimate if necessary).
- Do not include problems discovered through stormwater sampling. This information is covered in Section 3.

| | |
|--------------------------|-----------------------|
| Date Problem Discovered: | Describe the Problem: |
| | |
| Date Problem Discovered: | Describe the Problem: |
| | |
| Date Problem Discovered: | Describe the Problem: |
| | |
| Date Problem Discovered: | Describe the Problem: |
| | |

3. Corrective Actions Planned or Taken

Instructions: Complete this section for each pollutant parameter (e.g., turbidity, copper) that exceeded a benchmark during the previous calendar year (Jan 1st – Dec 31st). The permit requires you to identify the condition triggering the need for corrective action review. To do this, indicate below which quarters had a sample result that exceeded the benchmark. If more than one sample was taken at a sample location, indicate which quarters had an average sample result that exceeded the benchmark. Note: If you exceeded the benchmark for more than one parameter (e.g., turbidity and zinc), make additional copies of Section 3 and complete one for each parameter.

Pollutant Parameter: _____ benchmark was exceeded during the following quarters (check all that apply):

- ☐ 1st Quarter (January, February, March)
☐ 2nd Quarter (April, May, June)
☐ 3rd Quarter (July, August, September)
☐ 4th Quarter (October, November, December)

Instructions: For the pollutant parameter above, summarize any Level 1, 2, or 3 corrective actions completed during the previous calendar year and include the dates you completed the corrective actions.

☐ Level 1 corrective action

Describe the additional *operational source control* BMPs you implemented (Permit Condition S8.B):

Date corrective action was completed:

☐ Level 2 corrective action

Describe the additional *structural source control* BMPs you implemented (Permit Condition S8.C):

Date corrective action was completed:

☐ Level 3 corrective action

Describe the additional *treatment* BMPs you implemented (Permit Condition S8.D):

Date corrective action was completed:

Instructions: For the pollutant parameter listed above, describe the status of any Level 2 or 3 corrective actions triggered during the previous calendar year, but have not yet been completed. Identify the date you expect to complete corrective actions.

☐ Level 2 corrective action

Describe the status of the corrective action:

Date you expect to complete corrective action:

☐ Level 3 Corrective Action

Describe the status of the corrective action:

Date you expect to complete corrective action:

4. Certification by Permittee

"I certify under penalty of law that this document and all attachments were prepared under my direction, or supervision, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Printed Name

Company

Date

Signature*

***Note:** Signature not required if the form is submitted electronically through the Water Quality Permitting Portal

***Federal regulations require this report to be signed by the following person, or a duly authorized representative:**

- A. In the case of corporations, by a responsible corporate officer.
Note: Responsible Corporate Officer is defined on p.59 of ISGP:
<http://www.ecy.wa.gov/programs/wq/stormwater/industrial/ISGPFinal2015.pdf>
- B. In the case of a partnership, by a general partner of a partnership.
- C. In the case of sole proprietorship, by the proprietor.
- D. In the case of a municipality, state, federal, or other public facility: by either a principal executive officer or ranking elected official.

A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

Please upload the completed form to the Water Quality Permitting Portal:

<http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html>. Make sure you retain a copy for your records.

- Click on "Permit Submittals"
- Then, click on "My Permits", and
- Then, click on "Submittals".

If you have any issues or questions, please contact Ecology's IT support staff at WQWebPortal@ecy.wa.gov or call 800-633-6193/Option 3

If you have questions about this form, contact the following Ecology staff:

| Location | Contact Name | Phone | E-mail |
|--|---------------|--------------|--|
| City of Seattle, and Kitsap, Pierce, and Thurston counties | Josh Klimek | 360-407-7451 | josh.klimek@ecy.wa.gov |
| Island, King, and San Juan counties | Clay Keown | 360-407-6048 | clay.keown@ecy.wa.gov |
| Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Skagit, Snohomish, Spokane, Stevens, Walla, Whatcom, and Whitman counties. | Shawn Hopkins | 360-407-6442 | shawn.hopkins@ecy.wa.gov |
| Benton, Chelan, Clallam, Clark, Cowlitz, Douglas, Grays Harbor, Jefferson, Kittitas, Klickitat, Lewis, Mason, Okanogan, Pacific, Skamania, Wahkiakum, and Yakima counties. | Joyce Smith | 360-407-6858 | joyce.smith@ecy.wa.gov |

To request materials in a format for the visually impaired, call the Water Quality Program at Ecology, 360-407-6600, Relay Service 711, or TTY 877-833-6341.

Form 5. Employee Training Documentation

| Date of Training | Attendees | | Training Topic(s) Covered ¹ and Brief Description of Training Program/Materials (e.g., film, newsletter course) |
|------------------|---------------------|-----------|---|
| | Name (Please Print) | Signature | |
| | | | -Why ACW is covered under NPDES. -Stormwater Pollution Prevention Plan and SWPPP maps -Employee responsibilities under the SWPPP -Best management practices -Spill prevention and response -Treatment system maintenance |
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| Date of Training | Attendees | | Training Topic(s) Covered ¹ and Brief Description of Training Program/Materials (e.g., film, newsletter course) |
|------------------|---------------------|-----------|---|
| | Name (Please Print) | Signature | |
| | | | -Why ACW is covered under NPDES. -Stormwater Pollution Prevention Plan and SWPPP maps -Employee responsibilities under the SWPPP -Best management practices -Spill prevention and response -Treatment system maintenance |
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Adapted from Ecology Worksheet # available online at: <http://www.ecy.wa.gov/biblio/0410030.html>. Form template last updated: 12/2018.

¹ See Section 3.1.5 of the SWPPP for a list of topics that should be covered during employee training.

INDUSTRIAL STORMWATER MONTHLY INSPECTION REPORT

Inspections must be conducted by a person with the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and evaluate the effectiveness of best management practices required by this permit. Retain a copy of the completed and signed form in accordance with Permit Condition S9.C.

| | | |
|--|-------------------------|--|
| FACILITY NAME: | INSPECTION TIME: | DATE: |
| WEATHER INFORMATION: <ul style="list-style-type: none"> Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.): <hr/> <ul style="list-style-type: none"> Was stormwater (e.g., runoff from rain or snowmelt) flowing at outfalls and/or discharge areas shown on the Site Map during the inspection: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Comments: <hr/> | | |
| I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION | | |
| SWPPP and Site Map: Have a copy of the SWPPP and site map with you during the inspection so that you can ensure they are current and accurate. Use it as an aide in recording the location of any issues you identify during the inspection. <ul style="list-style-type: none"> Is the Site Map current and accurate? Is the SWPPP inventory of activities, materials and products current? Any new potential pollutant sources must be added to the map and reflected in the <i>SWPPP Facility Assessment & Tables 2, 2A, 3 and 5</i> . | Yes No | Findings and Remedial Action Documentation: Describe any findings below and the schedule for remedial action completion including the date initiated and date completed or expected to be completed. |
| Vehicle/Equipment Areas: Equipment cleaning: Check NA if not performed on-site. Skip section. Is equipment washed and/or cleaned only in designated areas? <ul style="list-style-type: none"> Observe washing: Is all wash water captured and properly disposed of? Equipment fueling: Check NA if not performed on-site. Skip section. <ul style="list-style-type: none"> Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills? Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater? Are structures in place to prevent precipitation from accumulating in containment areas? <ul style="list-style-type: none"> If not, is there any water or other fluids accumulated within the containment area? Note: If containment areas are not covered to prevent water from accumulating, the SWPPP must include a plan describing how accumulated water will be managed and disposed of. | Yes No NA | Findings and Remedial Action Documentation: |

| | | | | |
|--|-----|----|----|---|
| <p>Equipment maintenance:</p> <ul style="list-style-type: none"> • Are maintenance tools, equipment and materials stored under shelter, elevated and covered? • Are all drums and containers of fluids stored with proper cover and containment? • Are exteriors of containers kept outside free of deposits? • Are any vehicles and/or equipment leaking fluids? Identify leaking equipment. • Is there evidence of leaks or spills since last inspection? Identify and address. • Are materials, equipment, and activities located so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas)? <p>Add any additional site-specific BMPs:</p> <hr/> <hr/> <hr/> <hr/> <hr/> | Yes | No | NA | <p>Findings and Remedial Action Documentation:</p> |
|--|-----|----|----|---|

| I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION | | | | |
|--|-----|----|----|---|
| <p>Good Housekeeping BMPs:</p> <p>1. Are paved surfaces free of accumulated dust/sediment and debris?</p> <ul style="list-style-type: none"> • Date of last quarterly vacuum/sweep _____ • Are there areas of erosion or sediment/dust sources that discharge to storm drains? <p>2. Are all waste receptacles located outdoors:</p> <ul style="list-style-type: none"> • In good condition? • Not leaking contaminants? • Closed when is not being accessed? • External surfaces and area free of excessive contaminant buildup? <p>3. Are the following areas free of accumulated dust/sediment, debris, contaminants, and/or spills/leaks of fluids?</p> <ul style="list-style-type: none"> • External dock areas • Pallet, bin, and drum storage areas • Maintenance shop(s) • Equipment staging areas (loaders, tractors, trailers, forklifts, etc) • Around bag-house(s) • Around bone yards • Other areas of industrial activity: <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> | Yes | No | NA | <p>Findings and Remedial Action Documentation:</p> |

| | | | | |
|--|-----|----|----|--|
| Spill Response and Equipment: Are spill kits available, in the following locations? <ul style="list-style-type: none"> Fueling stations Transfer and mobile fueling units Vehicle and equipment maintenance areas Do the spill kits contain all the permit required items? <ul style="list-style-type: none"> Oil absorbents capable of absorbing 15 gallons of fuel. A storm drain plug or cover kit. A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity. A non-metallic shovel. Two five-gallon buckets with lids. Are contaminated absorbent materials properly disposed of? | Yes | No | NA | Findings and Remedial Action Documentation: |
| I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION | | | | |
| General Material Storage Areas: <ul style="list-style-type: none"> Are damaged materials stored inside a building or another type of storm resistance shelter? Are all uncontained material piles stored in a manner that does not allow discharge of impacted stormwater? Are scrap metal bins covered? Are outdoor containers covered? | Yes | No | NA | Findings and Remedial Action Documentation: |
| Stormwater BMPs and Treatment Structures: Visually inspect all stormwater BMPs and treatment structures devices, discharge areas infiltration and outfalls shown on the Site Map. <ul style="list-style-type: none"> Are BMPs and treatment structures in good repair and operational? Are BMPs and treatment structures free from debris buildup that may impair function? The permit requires Permittees to clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe. Based on this, do catch basins need to be cleaned? Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition? | Yes | No | NA | Findings and Remedial Action Documentation: |
| Observation of Stormwater Discharges: <ul style="list-style-type: none"> Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater and is not allowed to comeingle with stormwater or enter storm drains. Is process water comingling with stormwater or entering storm drains? Illicit discharges include domestic wastewater, noncontact cooling water, or process wastewater (including leachate). Were any illicit discharges observed during the inspection? | Yes | No | NA | Findings and Remedial Action Documentation: |

II. CORRECTIVE ACTION AND SWPPP MODIFICATIONS DESCRIPTIONS: Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs.

[illegible]

III. CERTIFICATION STATEMENTS AND SIGNATURES:

Inspector - Certification: This section must be completed by the person who conducted the site inspection prior to submitting this form to the person with signature authority (see Permit Condition G2) or a duly authorized representative of that person.

- ☐ The facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit.
- ☐ The facility is out of compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Inspector's Name – Printed

Inspector's Signature

Inspector's Title

Date _____

Permittee – Certification:

- ☐ The facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit.
- ☐ The facility is out of compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

| | | |
|--|--|--|
| | | |
|--|--|--|

PRINTED NAME of person with Signature
Authority (permit condition G2.A) or a Duly
Authorized Representative¹

SIGNATURE of person with **Signature Authority** (permit condition G2.A) or a **Duly Authorized Representative**¹

DATE _____

¹A person is duly authorized representative only if 1) the authorization is made in writing by a person described in Permit Condition G2.A and submitted to Ecology, and 2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated *facility*, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

Alaskan Copper Works Facility Spill Log

| Date | Spill | Leak | Location | Description | | | Cleanup/Preventive Measures Taken* |
|------|-------|------|----------|------------------|----------|------------------|------------------------------------|
| | | | | Type of Material | Quantity | Source, If Known | |
| | | | | | | | |
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Adapted from Ecology Worksheet #4 available online at: <http://www.ecy.wa.gov/biblio/0410030.html>. Log template last updated: 12/2008.

a. Include quantity of material recovered

APPENDIX D. COMPLETED SWPPP FORMS

Completed forms are not included in digital copy of SWPPP. Individual digital file folders are kept along with hard copies within the SWPPP binder. Completed SWPPP forms are available upon request.

SWPPP Certifications

Monthly Inspections

Maintenance Records

DMRs

Training Records

Spill Logs

APPENDIX E. ECOLOGY APPROVAL OF ENGINEERING REPORT



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

*Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341*

June 20, 2018

Carl Vinke
Alaskan Copper Works
3405 6th Ave S
Seattle, WA, 98124

**Re: Stormwater Treatment System Design Engineering Report Approval – Alaskan
Copper Works at 3405 6th Ave S, Seattle, WA**

Dear Mr. Vinke,

The Washington State Department of Ecology (Ecology) received your company's Stormwater Treatment Engineering Report (Report) that Catchment Solutions LLC submitted which described using pH adjustment and media filtration as the treatment system to comply with Level 3 Corrective Action requirements in the Industrial Stormwater General Permit (ISGP), Permit # WAR- 000139. The initial report was received by Ecology's Northwest Regional Office (NWRO) on May 14, 2018. The report has been reviewed by Bo Li, P.E., at Ecology's NWRO.

In accordance with RCW 90.48.110 and Chapter 173-240 WAC, the subject document is hereby APPROVED as meeting the intent of an Engineering Report and meeting the goal of achieving the applicable benchmark values of the Industrial Stormwater General Permit (ISGP).

This office is to be notified immediately of any proposed changes or revisions to the approved document. Any such changes or revisions must be issued in the form of addenda, technical appendices, or supplemental reports to the original approved documents and must be approved in writing by Ecology.

Ecology's review and approval of this document is to assure compliance and consistency with the appropriate rules, regulations, guidelines, planning and design criteria, and/or other similar documents. Ecology's review shall not be construed as a quality control check or as approval with respect to the completeness, accuracy, or adequacy of this document.

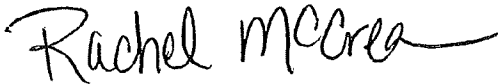
This approval does not relieve the owner(s) of the proposed facilities from any other approvals as may be required by other governmental reviewing agencies. In addition, this approval does not relieve the owner or owner's engineer from the responsibilities and liabilities that result from noncompliance with water pollution laws and regulations during the design, construction, or



operation of the proposed facilities. Also, this approval does not relieve the owner or the owner's engineer from the responsibilities for the technical adequacy and/or accuracy of the contents of this document.

If you have any questions or need any additional information, please do not hesitate to contact Bo Li, P.E. at bo.li@ecy.wa.gov, or call her at (425) 649-7284; or Alex White at alex.white@ecy.wa.gov, or call him at (425) 649- 7263.

Sincerely,

A handwritten signature in black ink that reads "Rachel McCrea". The signature is fluid and cursive, with a long horizontal stroke extending from the end of the name.

Rachel McCrea
Water Quality Section Manager
Northwest Regional Office

cc: Central File: WQ 9.5, **Alaskan Copper Works, WAR-000139**
Bo Li, NWRO, Ecology

**STORMWATER POLLUTION PREVENTION PLAN CERTIFICATION FORM
ALASKAN COPPER FACILITY
SEATTLE, WASHINGTON**

The Permittee shall use this form to sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S3 and S8 of the Industrial Stormwater General Permit.

- A SWPPP certification form needs to be completed and attached to all SWPPPs.
- Each time a Level 1, 2, or 3 Corrective Action is required, this form needs to be re-signed and re-certified by the Permittee, and attached to the SWPPP.

Is this SWPPP certification in response to a Level 1, 2 or 3 Corrective Action? ☒ Yes ☐ No

If Yes: Type of Corrective Action?: ☐ Level 1 ☐ Level 2 ☒ Level 3*

Date SWPPP update/revision completed: December 2018

Briefly describe SWPPP Update (use backside, if necessary):

SWPPP updated to include updated stormwater conveyance and treatment system, sample locations, Best Management Practices, maps, and appendices.

***Note:** For Level 3 Corrective Actions, a *Qualified Industrial Stormwater Professional* must review the revised SWPPP, and sign and certify below, in accordance with Condition S8.D.2.:

"The Permittee has made appropriate revisions to the SWPPP to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. Based on my review of the SWPPP, discharges from the facility are reasonably expected to meet the ISGP benchmarks upon implementation."

Chad Wiggins, PE
Qualified Industrial Stormwater Professional's Printed Name
Chad Wiggins
Qualified Industrial Stormwater Professional's Signature

Water Resources Engineer
Title
12/11/2018
Date

"I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Carl Vinke
Operator's Printed Name *
Carl Vinke
Operator's Signature *

Env. Compt. mgr
Title
12-12-18
Date

* Federal regulations require this document to be signed in accordance with Condition G2.

TABLE OF CONTENTS

| | <u>Page</u> |
|--|-------------|
| 1.0 INTRODUCTION | 1-1 |
| 2.0 FACILITY ASSESSMENT (S3.B.2) | 2-1 |
| 2.1 FACILITY DESCRIPTION (S3.B.2.a) | 2-1 |
| 2.1.1 Parcel 4155 | 2-2 |
| 2.1.2 Parcel 3736 | 2-2 |
| 2.1.3 Parcel 3765 | 2-3 |
| 2.1.4 Parcel 0012 | 2-4 |
| 2.1.5 Potential Sources of Stormwater Pollution (S3.B.2.b) | 2-4 |
| 2.2 STORMWATER SYSTEM DESCRIPTION (S3.B.1.c.) | 2-5 |
| 3.0 BEST MANAGEMENT PRACTICES (S3.B.4.) | 3-1 |
| 3.1 OPERATIONAL SOURCE CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.i.) | 3-2 |
| 3.1.1 Pollution Prevention Team (S3.B.3) | 3-2 |
| 3.1.2 Good Housekeeping (S3.B.4.b.i.2) | 3-2 |
| 3.1.3 Preventive Maintenance (S3.B.4.b.i.3) | 3-4 |
| 3.1.4 Spill Prevention and Cleanup (S3.B.4.b.i.4) | 3-5 |
| 3.1.5 Employee Training (S3.B.4.b.i.5) | 3-7 |
| 3.1.6 Inspections and Recordkeeping (S3.B.4.b.i.6) | 3-7 |
| 3.2 STRUCTURAL SOURCE CONTROL AND OPERATIONAL BEST MANAGEMENT PRACTICES BY INDUSTRIAL ACTIVITY (S3.B.4.b.ii) | 3-9 |
| 3.2.1 BMPs for Fueling at Dedicated Stations | 3-9 |
| 3.2.2 BMPs for Loading and Unloading Areas for Liquid or Solid Material | 3-11 |
| 3.2.3 BMPs for Maintenance of Stormwater Drainage and Treatment Systems | 3-12 |
| 3.2.4 BMPs for Roof/Building Drains at Manufacturing Buildings | 3-14 |
| 3.2.5 BMPs for Storage of Liquids or Dangerous Waste Containers (Outside) | 3-14 |
| 3.2.6 BMPs for Storage of Liquids in Permanent Aboveground Tanks | 3-15 |
| 3.2.7 BMPs for Urban Streets | 3-17 |
| 3.3 TREATMENT BEST MANAGEMENT PRACTICES (S3.B.4.b.iii) | 3-18 |
| 3.4 STORMWATER PEAK RUNOFF AND VOLUME CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.iv) | 3-19 |
| 3.5 EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.v) | 3-19 |
| 4.0 STORMWATER MONITORING PLAN (S3.B.5) | 4-1 |
| 4.1 MONITORING LOCATIONS, REQUIREMENTS, AND METHODS | 4-1 |
| 4.1.1 Methods for Visual Inspections | 4-2 |
| 4.1.2 Methods for Stormwater Sampling | 4-2 |
| 4.2 RECORDKEEPING | 4-4 |
| 4.3 SUBMITTAL OF SAMPLES TO THE LABORATORY | 4-4 |
| 4.4 EVALUATION OF SAMPLING RESULTS | 4-5 |
| 4.5 SUBMITTING THE SAMPLING RESULTS TO ECOLOGY | 4-7 |

TABLES

| <u>Table</u> | <u>Title</u> |
|--------------|---|
| 1 | Stormwater Best Management Practices Potentially Applicable to Alaskan Copper |

APPENDICES

| <u>Appendix</u> | <u>Title</u> |
|-----------------|---|
| A | Site Maps (Figure 1 Vicinity Map, Figure 2 Site Map, Figure 3 Facility Operations and Potential Stormwater Contaminate Sources) |
| B | Ecology Permit Coverage Letter and Industrial Stormwater General Permit |
| C | Blank SWPPP Forms 1-4 (Monthly Inspection, Spill Log, Employee Training, Annual Report) |
| D | Completed SWPPP Forms (Monthly Inspection, Quarterly Sampling, Maintenance). Items will be in digital folder and is available upon request. |
| D | Ecology Approval of Engineering Report |

Summary of Submittals, Onsite Documentation and Required Activities

SUMMARY OF PERMIT REPORTS & SUBMITTALS

| Permit Section | Submittal | Frequency | Due Date(s) |
|----------------|--|----------------------------|---|
| S1.F | Conditional "No Exposure" Certification Form | As necessary | As necessary, with renewals every 5 years |
| S2.B | <i>Application</i> for Permit Coverage | As necessary | As necessary |
| S2.B. | Request Modification of Permit Coverage | As necessary | As necessary |
| S2.D | Request Transfer of Coverage | As necessary | As necessary |
| S8.D | Level 3 Engineering Report | As necessary | May 15 th , prior to Level 3 deadline ¹ |
| S8.D | Level 3 O&M Manual | As necessary | 30 days after Level 3 installation |
| S9.A | Discharge Monitoring Reports (DMRs) | 1/quarter | February 15 th , May 15 th , August 15 th , November 15 th |
| S9.B | Annual Report | 1/year | May 15 th |
| S9.C. | SWPPP, if requested by <i>Ecology</i> | Per <i>Ecology</i> request | Within 14 days of request |
| S9.E | Noncompliance Notification | As necessary | Within 30 days of noncompliance event |
| G8 | Duty to Reapply | 1/permit cycle | July 3, 2019 |

SUMMARY OF REQUIRED ONSITE DOCUMENTATION

| Permit Condition(s) | Document Title |
|---------------------|--|
| S3.A.4.a | Stormwater Pollution Prevention Plan (SWPPP) |
| S9.B | Copies of Annual Reports |
| S9.C.1.a | Copy of Permit |
| S9.C.1.b | Copy of Coverage Letter |
| S9.C.1.c | Original Sampling Records (Field Notes and Laboratory Reports) |
| S7.C & S9.C.1.d | Site Inspection Reports |
| S9.C.1.j | Copies of Discharge Monitoring Reports (DMRs) |

SUMMARY OF SELECTED REQUIRED ACTIVITIES

| Permit Condition | Activity Description | Frequency |
|------------------|--------------------------------------|---|
| S7 | Monthly Inspections | Qualified personnel conduct and document visual inspections of the site monthly on the monthly inspection form |
| S3.B.4.b.i.5 | Employee Training | Conducted at least once per year |
| S7 | BMP Inspections | At least once per month during monthly inspections |
| S3.B.4.b.i.2.a | Vacuum Sweeping | Once per month or as needed but not less than once per quarter |
| S3.B.4.b.i.3.a | Catch Basins Cleaning | As needed when depths of debris reaches 60% of the sump depth and when the depth of debris reaches 6 inches below outlet pipe |
| S3.B.4.b.i.2.d | Cover Solid Waste Storage Containers | At all times when not in use |
| S7 | Stormwater Observations | At least once per quarter during qualifying storm events and also during monthly inspections if conducted during a storm event |
| S4 | Sampling | Sampling at applicable stormwater discharge locations shall be conducted at least once per quarter: 1st Quarter = January, February, and March 2nd Quarter = April, May, and June 3rd Quarter = July, August, and September 4th Quarter = October, November, and December |
| S6.C | Additional Sampling | For discharge to impaired waters and Puget Sound sediment cleanup sites, monitor for total suspended solids (TSS), and a 30 mg/L discharge limit for TSS applies starting 2017 |
| S9.A | DMR Submittal | Submit to Ecology within 45 days of the end of each quarter |
| S8 | Corrective Actions | Implement: -Level One Corrective Actions (CAs) within 45 days of the end of each quarter; -and Level Two and Three CAs by Sept 30 of the following year |
| S9.B | Submit Annual Report | Submit to Ecology by May 15 of each year starting in 2011 |

1.0 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the Alaskan Copper Works (ACW) facility (the “Facility”), located in Seattle, Washington, in accordance with the requirements outlined in the Washington State National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater General Permit (ISGP) (Ecology 2014); ACW’s permit number is WAR000139. A copy of the ISGP is provided in Appendix B.

This SWPPP is, as defined in the Permit, a “documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of stormwater.” In accordance with the Permit, this SWPPP contains five required SWPPP components [facility map, facility assessment, Best Management Practices (BMPs), Spill Prevention and Emergency Cleanup Plan (SPECP), and a sampling plan] and is divided into the following three main sections:

- **Facility Assessment (Section 2.0):** Presents a general facility description, facility map, inventory of industrial activities, and inventory of materials.
- **Best Management Practices (Section 3.0):** Describes BMPs in use or planned for use at the Facility including a listing of the Alaskan Copper pollution prevention team.
- **Stormwater Monitoring Plan (Section 4.0):** Presents a plan for conducting quarterly stormwater sampling and monthly site inspections at the Facility.

Where applicable, the Permit Condition reference is included in parentheses throughout the text of this SWPPP for major headings and select subheadings. This document will be updated, as needed, to reflect changes to the Alaskan Copper stormwater management program, including changes in BMPs and the addition of new industrial activities or potential pollutant sources, or in response to Permit modifications. Each update will be accompanied by a newly signed SWPPP Certification Form (first page of SWPPP). A copy of this SWPPP will be maintained at the Alaskan Copper office at 628 South Hanford. A list of the major revisions to previous versions of the SWPPP is presented below.

| Date | Revision |
|---------------|---|
| November 2005 | Add ROMIC Environmental Technologies, Inc. as an authorized agent. |
| November 2007 | Add Clean Harbors Environmental Services, Inc. as an authorized agent. |
| May 2009 | Update SWPPP; add Clean Harbors Environmental Services Personnel to SWPPP. |
| July 2009 | SWPPP revisions and updates. |
| January 2010 | Update SWPPP to comply with 2010 Industrial Stormwater General Permit. |
| May 2010 | Revise SWPPP to include additional operational source control and treatment BMPs as part of 1Q10 level one corrective actions for elevated sample results at cb331707 and cb330001. (Revision = reduced truck traffic; installed downspout filter units and planter barrels). |
| August 2010 | Revise SWPPP to include additional operational source control and structural BMPs as part of 2Q10 level one corrective actions for elevated sample results at cb331707 and cb330001. (Revision = analyze roof drain downspouts). |

| Date | Revision |
|--------------------|---|
| September 2010 | Revise SWPPP to include the following BMP: "If catch basins or storm drains are observed to not drain properly and contribute to turbidity and suspended solids, then inspect drain lines for debris or sediment blockage or broken piping. Clean and repair or replace storm drain lines as necessary to restore proper drainage." In September 2010 a storm drain video/cleaning contractor was hired to conduct storm drain video work and cleaning as necessary due to the lack of proper drainage out of cb330001. The video inspection could not find any particularly large deposit of solids or other signs of storm drain blockage and therefore pipe cleaning was not determined to correct the issue of poor drainage (and possible backup of stormwater/solids from the City storm drain line) at that location. . |
| November 2010 | Revise SWPPP to include additional operational and structural source control BMPs as part of 3Q10 and 4Q10 level one and/or 2010 level two corrective actions for elevated sample results at cb331707 and cb330001. [Revisions = increased frequency of cleaning or replacing cb inserts; sample effluent of downspout filter units and/or planter barrels at cb331707 if benchmarks are exceeded starting with the first quarter of 2011. In response to this BMP, filtration media at rain gardens A and C and at downspout filters B and D were replaced during April/May 2011. (Revised note: This BMP does not apply to cb330001 which did not have planter barrels until summer 2011)]. |
| March 24, 2011 | Revise SWPPP to include additional operational source control BMPs as part of 1Q11 level one corrective actions for elevated sample results at cb331707 and cb330001. (Revisions = environmentally preferable materials to be emphasized; catch basin filters to be replaced instead of cleaned if filter performance poor). |
| July 13, 2011 | Revise SWPPP to include additional operational source control and treatment BMPs as part of 2Q11 level one and/or 2010 level three corrective actions for elevated sample results at cb331707 and cb330001. (Revision = additional roof downspout filters/planter barrels added). |
| September 29, 2011 | Revise SWPPP to include Appendix D technical memorandum addressing the full 2010 triggered level three corrective action stormwater treatment BMPs for elevated sample results at cb331707 and cb330001 finalized on September 26, 2011. (Revisions = oyster shells added to catch basin as treatment media for cb330001; documented previous installation of downspout filter units and/or planter barrels in May 2010 and/or July 2011 as level three corrective action for cb331707 and cb330001). These BMPs also address the required 3Q11 level one corrective action BMP requirements for cb331707 and cb330001). Note The description of the BMPs added to the SWPPP on July 14, 2011 as part of 2Q11 Level One Corrective Actions were moved from the main body of the SWPPP to Appendix D so that the full extent of 2010 Level Three Corrective Action stormwater treatment BMPs implemented at the facility are all described in Appendix D. |
| February 13, 2012 | Revise SWPPP to include a new attachment of an updated facility map showing stormwater treatment units, including the installation of a second roof downspout rain barrel for cb330001 which was installed in August 2011. Revise SWPPP revision table for clarity (minor edits to previous SWPPP revision dates, etc.). Note: Per level one corrective action requirement for elevated sample results at sampling location cb331707, the SWPPP was reviewed and found to be in compliance with the Permit. No additional operational BMPs from the Stormwater Management Manual from Western Washington (which had not already been implemented) were found that would be applicable to the facility. Existing operational BMPs (sample results from downspout filter units and/or planter barrels) will be monitored to determine a suitable approach of achieving benchmark values – possibly as part of 2012 level two or level three corrective action(s) depending on future 2012 results from sampling location cb331707. |
| May 11, 2012 | Revise SWPPP to include planned schedule for sampling of inlet/outlets during the second quarter of 2012 of select treatment systems that drain into cb331707. Results of sampling will be used to determine if improved O&M of existing treatment units is needed or if additional BMPs might be needed in the future. Based on first quarter 2012 results and an assessment of the facility SWPPP, no additional BMPs beyond treatment system sampling were added to the SWPPP at this time. Note: A sampling schedule for treatment system units that drain into cb331707 has been added to this SWPPP as table 3. Sampling is scheduled for the second quarter of 2012 or the next quarter in which there is a qualifying rain event. Table 3 also includes results of previous treatment system unit sampling results and will be updated each time treatment system units are sampled. |

| Date | Revision |
|-------------------|--|
| November 15, 2013 | <p>The SWPPP was revised to remove the requirement to sample for TSS, as the facility does not discharge to a 303(d)-listed waterbody. A letter from the Washington State Department of Ecology stating that the facility does not discharge to a 303(d)-listed waterbody was added to the SWPPP as Appendix E.</p> <p>The facility site map provided in Figure 2 has been updated to add stormwater surface flow direction arrows.</p> <p>Appendix D has been updated from the September 2011 Level Three Corrective Actions Technical Memorandum (which addressed corrective actions triggered by the 2010 sampling results) to the May 2013 Engineering Report (which addresses corrective actions triggered by the 2012 sampling results). The May 2013 Engineering Report describes the plan to expand roof drain downspout stormwater treatment at the facility by installing new stormwater treatment units. The SWPPP was revised to include a description of the expanded stormwater treatment BMPs. In addition, Table 3, mentioned above in the May 11, 2012 revision description, has been moved from the main body of the SWPPP to the Engineering Report in Appendix D.</p> <p>Other minor revisions were made to include the new Industrial Stormwater General Permit requirements that went into effect under the current Permit (effective date of July 1, 2012).</p> |
| January 15, 2015 | <p>The SWPPP has been revised to reflect the discontinuation of industrial operations at Building 3317 and the area south of that building, along with subleasing of that building and the requested elimination of the use of the sampling point at that location. Changes were also made to add total suspended solids (TSS) monitoring and other conditions of the new revised Permit that became effective January 2, 2015.</p> |
| February 15, 2017 | <p>Alaskan Copper has continued to consolidate and reduce its area of operations. A portion of Building 3300 and the paved area south of it were leased to another business. In addition, the paved area south of Bldg. 3300 is now used only for storage of clean stainless steel final product that provides no potential source of concern for copper, zinc, turbidity, or suspended solids. No other Industrial activity occurs in areas not draining to the combined/sanitary sewer. With that property change the designated sampling point has been changed as of 3rd quarter 2016.</p> <p>The SWPPP is also updated to address the unexpected rise in copper and zinc concentration despite the elimination of exposed activity, despite the continued monthly and quarterly pollutant source control inspections/actions, and despite the continued use of catch basin stormwater treatment. Therefore, based on 2016 results, a new engineering report is being prepared for a new stormwater treatment system, and the report will be completed in advance of the May 15, 2017 deadline.</p> |
| November 25, 2018 | Added Catchment Solutions LLC as an authorized agent |
| May 25, 2018 | Revised SWPPP with updated facility assessment and site figures. Changed laboratory where samples are delivered. |
| December, 2018 | ACW has installed an above ground stormwater treatment system for all industrial stormwater basins east of 6 th Ave S. The SWPPP has been updated to Included discussion regarding new treatment system with updated site maps and drainage basins, sampling locations, sampling procedures, and appendices. |

2.0 FACILITY ASSESSMENT (S3.B.2)

As stated in the Permit, the facility assessment includes: “a description of the facility; an inventory of facility activities and equipment that contribute to or have the potential to contribute any pollutants to stormwater; and, an inventory of materials that contribute to or have the potential to contribute pollutants to stormwater.”

2.1 FACILITY DESCRIPTION (S3.B.2.a)

ACW operates a metal fabrication business focused on manufacturing corrosion-resistant alloy products. The main operation at ACW is fabricating stainless steel pipe, fittings, and pressurized vessels. The Facility operates under the Standard Industrial Classification Code 3498 (fabricated pipe and fittings) and North American Industry Classification System Code 332313 (plate work manufacturing). Normal business hours are between 6:00 a.m. and 11:30 p.m. Operations are split between two shifts with 108 employees operating on day shift and 28 employees operating on night shift. ACW manufactured or fabricated approximately 1.3 million lbs. of pipe and fittings in 2017. Metals storage (raw materials and finished product) is the principal outdoor activity. Other activities include equipment maintenance (a maintenance shop is located in Building 628) and the loading and unloading trucks. There are no seasonal variations in the operating hours.

According to the Permit, facilities with a standard industrial classification (SIC) category of 34xx for fabricated metal products (Alaskan Copper Works has an SIC code of 3443, fabricated plate work – boiler shops) conduct operations and activities that are considered industrial activities requiring a stormwater permit. Industrial activities currently performed at this Facility include:

| | |
|---|-------------------------|
| Steel pipe forming, bending, and cutting | Cutting operations |
| Pipe welding and grinding | Plasma table operations |
| Outdoor storage and transfer of materials | Vehicle maintenance |
| Vehicle fueling | |

These activities are limited to inside buildings and are not conducted within the stormwater drainage area.

The Alaskan Copper Seattle Facility is located on multiple parcels along 6th Ave. S, between S Hinds Street and S Forest Street. Parcel-specific operations and drainage characteristics for the facility are presented below:

The Facility comprises four parcels along 6th Ave S (i.e., Parcels 4155, 0012, 3765, and 3736). Operations are primarily conducted in warehouses with finished product storage and material loading and unloading taking place outside. The majority of the raw material product storage is within basins that either discharge to ground or the County combined sewer system. Operations vary within each building. Specific

operations and drainage characteristics for each parcel and building are further discussed below. Appendix A provides facility Figures (maps). Figure 1 presents the vicinity map of Alaskan Copper Works. Figure 2 presents the Facility map and identifies building addresses, discharge points (DPs), and associated outfalls and stormwater infrastructure. Figure 3 identifies Facility operations, potential stormwater contaminant sources, and drainage basins.

2.1.1 PARCEL 4155

Parcel 4155 is situated along the western edge of 6th Ave S and features two buildings (i.e., Buildings 3405 and 3317). Building 3405 serves as a warehouse and includes the administrative offices in the north extension. Roof runoff from the administrative office portion is routed to the ACW's drainage system. The warehouse is split between two operations. The north half of the warehouse is ACW's welding fabrication and finishing shop. The south half of the warehouse is tenant space. A chain-link fence inside the warehouse segregates ACW's operations from those of the tenant. The majority of the warehouse roof discharges to the County's combined sewer system, while a small portion along the eastern edge of the roof is routed to the stormwater system, as is the parking area east of the warehouse. The outdoor area south of the warehouse is also provided for tenant operations and is enclosed by a fence. This area is partially unpaved, and stormwater infiltrates in the ground. West of Building 3405, ACW stores small quantities of finished product and wood and metal waste containers. This area is partially unpaved, and stormwater infiltrates in the ground. Building 3405 and the building to the north (Building 3317) share a common driveway/parking area in the vacated S Hinds St right-of-way (ROW). ACW does not operate in Building 3317, but the south half of the building's roof and parking area drain to ACW's drainage system. All stormwater from this ACW's drainage system discharges to the MS4 via a single outfall (DP-10) into a City-owned maintenance hole within the 6th Ave S ROW.

2.1.2 PARCEL 3736

Parcel 3736 is located north of S Hanford St and east of 6th Ave S and has two buildings (i.e., Buildings 2958 and 628) and multiple drainage basins. Building 2958 houses ACW's human resources department, serves as storage for finished fittings and smaller components, and is where the company conducts shipping and receiving. The roof mainly discharges stormwater to the County's combined sewer system. ACW also stores parts north of the building in partially paved areas. Stormwater in these areas infiltrates the ground near the rail ROW north of the Facility. South of Building 2958, raw materials and finished products are stored outside. The majority of stormwater from this area discharges to the County's combined sewer system; however, a small drainage basin (D01) along the north half of the S Hanford St

ROW discharges stormwater through a single CB at the edge of the property. This stormwater gravity flows south to the north lift station that is routed to the centralized treatment system.

The second building, Building 628, houses the maintenance shop; all maintenance activities are conducted inside this building. The roof of the maintenance shop, except for a small portion along the westerly edge, discharges to the County's combined sewer system. Stormwater from the westerly edge of the roof and west of the building discharges to the ground via infiltration on the north side of the parcel.

2.1.3 PARCEL 3765

Parcel 3765 is located south of the vacated S Hanford St ROW and has a single building (i.e., Building 3200) and multiple drainage basins. Building 3200 is a large manufacturing warehouse. ACW also conducts shipping and receiving on the northern edge of the building. Administrative offices are located in an attached structure at the northeast corner of the warehouse. The main activity within the warehouse is the production of stainless steel pipe and other alloy metal components. ACW operates a plasma cutting table, hydraulic presses, and other machinery used in the production of these components. A nitric-acid passivation system is located in the northeast corner of the warehouse. Operation and discharge of the passivation system waste stream is authorized under King County Waste Discharge Permit No. 728-06.

Runoff from the northern edge of the warehouse, where shipping and receiving is conducted, and most of the outdoor operations north of the warehouse drains to the County's combined sewer system. A small drainage basin (D02) along the south half of the S Hanford St ROW near the entrance at 6th Ave S discharges stormwater through a single CB at the edge of the property parcel. This stormwater flows to the north lift station that is then routed to the centralized treatment system. Hi-flow bypass from the lift station is allowed within the D02 CB and discharges to a City-owned maintenance hole within the S Hanford St ROW via a single outfall (DP-02).

Roof runoff from the original warehouse structure is routed through downspouts to a stormwater conveyance line that runs from west to east along the southern edge of the warehouse. The parking lot west of the warehouse drains to the same stormwater conveyance line. Drainage basin D03 comprises the roof and parking lot. Stormwater from this drainage basin is routed through the central lift station and is pumped to the centralized treatment system. Hi-flow bypass is allowed at the central lift station and discharges to a maintenance hole on the northeastern corner of the S Horton St and 6th Ave S intersection (outfall DP-03). The centralized treatment system for the parcels east of 6th Ave S is located just south of the 3200 building. Treated effluent from the treatment system is conveyed to a riser within the central lift station and ultimately discharges to the DP-03 outfall.

2.1.4 PARCEL 0012

Parcel 0012 is located east of 6th Ave S, between the S Hinds St ROW to the south and the S Horton St ROW to the north and has a single building (i.e., Building 3300). A tenant operates Building 3300, with tenant parking located west of the building; however, ACW stores finished product to the north and south of Building 3300. Stormwater from this parcel is segregated into seven stormwater drainage basins (i.e., D04, D05, D06, D07, D08, D09, and D95). Additionally, stormwater runoff from the northeastern portion of the roof, a portion of pavement north of the building, and pavement east of the building discharges to the County's combined sewer system. The remaining area between Buildings 3300 and 3200 (which is located on Parcel 3765), and the northwestern portion of the roof drains into drainage basin D04. Stormwater is conveyed in a paved ditch line that ultimately discharges to a CB near the DP-03 maintenance hole. This CB is routed directly to the central lift station. A small portion of pavement northwest of Building 3300 (drainage basin D05) discharges to a CB (DP-05) on the southeast corner of the S Horton St and 6th Ave S intersection. The north half of the tenant parking lot, west of Building 3300 (drainage basin D06) discharges stormwater to a CB (outfall DP-06) that is near the DP-05 CB.

The southeast portion of Building 3300 and just over half of the paved portion south of the building (drainage basin D07) drains to the south lift station. A paved ditch line along the southern border of the parcel discharges to a CB that is routed to the south lift station. The south lift station pumps water to the centralized treatment system. Hi-flow bypass is allowed at the south lift station to the MS-4 (DP-07). The south portion of the parking lot, west of Building 3300 (drainage basin D08) drains to a CB (DP-08) on the northeast corner of the S Hinds St and 6th Ave S intersection. Drainage basin D09 receives minimal drainage from the parking lot via a CB (DP-09) near the DP-08 CB. The southwest portion of the Building 3300 roof along with the majority of the tenant's fenced in storage yard (tenant basin) drains to a CB within the tenant storage area. A small basin that runs from east to west within 50 feet of the south fence line (drainage basin D95) drains to a CB (DP-9.5) on the southeast corner of the S Horton St and 6th Ave S intersection. Drainage basins D05, D06, D08, D09, and D9.5 receive drainage solely from parking and non-industrial areas and discharge directly to the MS4.

2.1.5 POTENTIAL SOURCES OF STORMWATER POLLUTION (S3.B.2.b)

The following items that result from Facility operations, or that are stored at the Facility, are potential sources of stormwater pollution:

| | |
|-----------------------------------|---|
| Cutting fluid | Cooling fluid |
| Lubrication grease | Galvanized or copper alloy metal products |
| Fine particulates from processing | Facility buildings (metals from roofs or walls) |

In accordance with Permit condition S3.b.2.c.iii, this SWPPP also addresses potential stormwater pollutants from past activities, by noting that no known potential sources of pollutants from past activities, materials, and spills were previously handled, treated, stored, or disposed of in a manner to allow ongoing exposure to stormwater. There have been no known or recorded significant spills or leaks of toxic or hazardous pollutants at the Facility that migrated off-property within the last 5 years. Minor spills may have occurred inside and outside of the Facility structures but were contained and promptly cleaned up.

To prevent potential pollutants associated with these potential sources from reaching stormwater, the Facility employs the BMPs described in Section 3.0 of this SWPPP.

2.2 STORMWATER SYSTEM DESCRIPTION (S3.B.1.c.)

As described in the section above, ACW operates across four parcels with 11 discrete stormwater connections to the City MS4. Other portions of the facility discharge to the King County Sanitary Sewer System or discharge to ground. Stormwater drainage basins D05, D06, D08, D09 and D95 are small basins west of the 3300 building that only receive stormwater runoff from administrative parking areas. The remaining stormwater drainage basins east of 6th Ave S. (D01, D02, D03, D04, D07) have industrial operations within the basins and stormwater is routed to a centralized treatment system just south of the 3200 building.

Three lift stations are utilized to collect and pump stormwater to the above ground stormwater treatment system as described in section 3.3 below. Basin D01 was modified to drain south to the north lift station. The outlet at DP-01 has been capped. Basin D02 drains north to the north lift station. A riser has been added to the existing outlet to allow for high-flow bypass during peak storm events. Basin D03 is routed into the central lift station. The high flow bypass within the central lift station is routed to the existing DP-03 outfall. Treated water from the stormwater treatment system discharges into the riser outlet of the central lift station. The basin D04 catch basin is routed east to the central lift station. The existing DP-04 outlet has been capped. A berm was installed along the gate north of the bus yard, south of the tenant storage yard for the 3300 building. This berm keeps industrial stormwater from entering the parking lot. A catch basin was installed in the old DP95 basin just south of the D07 basin which is routed to the south lift station. The south lift station collects surface flow where the DP-07 outfall is located. A high-flow bypass riser is installed in the south lift station that is routed to the DP-07 outfall.

Outfall DP-2, which only discharges during high-flow bypass ultimately discharges to the East watery through the City MS4 at the Lander Outfall. All other stormwater outfalls connected to the MS4 ultimately discharges to the Lower Duwamish Waterway at the Diagonal Outfall.

3.0 BEST MANAGEMENT PRACTICES (S3.B.4.)

The Permit identifies the following five categories of BMPs that may be needed at a facility to control stormwater discharge:

- **Operational Source Control BMPs (Section 3.1; S3.B.4.b.i.):** These BMPs are required at all facilities covered under the Permit and are managerial-type measures that are implemented to prevent or reduce pollution of stormwater; they specifically exclude construction of pollution control measures. Examples include general housekeeping activities, formation of a pollution prevention team, and employee training.
- **Structural Source Control BMPs (Section 3.2; S3.B.4.b.ii.):** These BMPs require construction or use of a physical structure to control pollution of stormwater. Examples include construction of a roof over a drum storage area or a containment berm around an aboveground storage tank.
- **Treatment BMPs (Section 3.3; S3.B.4.b.iii.):** These BMPs consist of actual stormwater treatment systems designed to treat polluted stormwater. Examples include catch basin insert filters, enhanced sedimentation vault devices, and use of activated carbon to remove petroleum hydrocarbons.
- **Stormwater Peak Runoff Rate and Volume Control BMPs (Section 3.4; S3.B.4.b.iv.):** These BMPs provide stormwater detention or retention to reduce the peak rate of stormwater runoff, where necessary to minimize streambank erosion within receiving waters.
- **Erosion and Sediment Control BMPs (Section 3.5; S3.B.4.b.v):** These BMPs are designed to limit soil erosion and to control eroded soil, and are most commonly used during site construction. Examples include seeding and covering exposed soil, and the use of silt fencing.

The following section provides a general description of the BMPs (in italics) that are required by the Permit and then describes in greater detail the specific application of these BMPs at the Facility. The BMPs contained in this SWPPP are consistent with the BMPs contained in the Washington State Department of Ecology (Ecology) 2012 *Stormwater Management Manual for Western Washington, as Amended in December 2014* (2014 Manual). Therefore, demonstration of BMP equivalency is not provided in this SWPPP. In addition, the 2014 Manual contains BMPs that provide all known, available, and reasonable methods of prevention, control, and treatment (AKART) of stormwater pollution to ensure that discharges do not cause or contribute to a violation of water quality standards, and comply with federal technology-based treatment requirements under 40 CFR 125.3.

The Permit lists specific operational and structural source control BMPs that must be implemented at all permitted facilities and requires permittees to implement all operational source control BMPs, structural source control BMPs, and treatment BMPs listed as “applicable” in Ecology’s 2014 Manual. For Alaskan Copper, these “applicable” BMPs are found in Volume IV of the 2014 Manual, available online at: <http://www.ecy.wa.gov/programs/wq/stormwater/manual.html>. This list, along with each BMP’s potential applicability to the Facility, is provided in Table 1. Additional descriptions of the applicable BMPs for the Facility are provided in the following sections.

3.1 OPERATIONAL SOURCE CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.i.)

This section describes operational source control BMPs that are required by the Permit for all industrial activities and operations covered under the Permit. Recommended BMPs are also listed where applicable. Additional operational BMPs are listed in Section 3.2 for specific industrial activities and operations, where required by the Permit.

3.1.1 POLLUTION PREVENTION TEAM (S3.B.3)

Unless noted otherwise, the Facility adheres to the following pollution prevention team BMPs, applicable under the 2014 Manual.

- *The SWPPP shall identify specific individuals by name or by title within the organization (pollution prevention team) whose responsibilities include: SWPPP development, implementation, maintenance, and modification.*
 - **Pollution Prevention Team:** The Pollution Prevention Team for the Facility shall consist of the Responsible Official and the SWPPP Coordinator. The Responsible Official is the person with overall responsibility for Permit compliance, has delegated authority to sign discharge monitoring reports (DMRs) and inspection forms, and is to ensure that adequate resources are made available to the SWPPP Coordinator in order to implement the BMPs and monitoring requirements in the SWPPP. The SWPPP Coordinator has overall responsibility for developing, implementing, maintaining, and revising this SWPPP. Other Facility employees will assist the Pollution Prevention Team as necessary. Contact information for the Facility Responsible Official and SWPPP Coordinator is provided below.

| PP Team Role | Name | Office Phone / Cell Phone |
|----------------------|-----------------|---------------------------|
| Responsible Official | Carl Vinke | (206) 382-6590 / (b) (6) |
| SWPPP Coordinator | Gerald Thompson | (206) 382-8379 / |

Catchment Solutions (206-486-6644), other environmental consulting firms, or other designated contracted personnel, may assist the Facility in SWPPP preparation, employee training, stormwater sampling, and BMP assessment services.

3.1.2 GOOD HOUSEKEEPING (S3.B.4.b.i.2)

The following good housekeeping BMPs are considered applicable in the 2014 Manual and are adhered to at the Facility, unless noted otherwise.

- *Promptly contain and clean up solid and liquid pollutant leaks and spills, including oils, solvents, fuels, and dust, from manufacturing operations on any exposed soil, vegetation, or paved area.*
 - **Spills:** See Section 3.1.4 on spill prevention and cleanup.
- *Clean oil, debris, sludge, etc., from all BMP systems regularly, including catch basins, settling/detention basins, oil/water separators, boomed areas, and conveyance systems, to*

prevent the contamination of stormwater. Refer to the Washington State Department of Ecology's (Ecology) regional offices to assist in determining if a waste must be handled as hazardous waste.

- **Catch Basins:** See Section 3.2.3 on Maintenance of Stormwater Drainage and Treatment Systems.
- *Promptly repair or replace substantially cracked or otherwise damaged paved secondary containment, high-intensity parking, and any other drainage areas, which are subjected to pollutant material leaks or spills.*
- *Promptly repair or replace all leaking connections, pipes, hoses, valves, etc., that can contaminate stormwater.*
- *Sweep paved material handling and storage areas regularly, as needed, for the collection and disposal of dust and debris that could contaminate stormwater. Do not hose down pollutants from any area to the ground, storm drain, conveyance ditch, or receiving water unless necessary for dust control purposes to meet air quality regulations and unless the pollutants are conveyed to a treatment system approved by the local jurisdiction.*

In addition to these BMPs from the 2014 Manual, the Permit also specifically requires the following Good Housekeeping BMPs:

- *Vacuum paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated pollutants a minimum of once per quarter.*
 - **Vacuum Sweeping:** Facility personnel or outside contractors inspect, clean, and maintain areas of the Facility that accumulate dust and other debris. Paved areas are vacuum-swept monthly. Sweeping the dirt and associated pollutants from paved areas of the Facility can be one of the most effective stormwater pollutant source control measures, so increasing the frequency of sweeping will be considered any time that stormwater benchmarks are found to have been exceeded. Sweeping may not be practical in areas where material storage is present. Prior to vacuum sweeping open areas, use electric or gas-powered blowers to remove accumulated solids from underneath material storage areas. The removed solids should be promptly vacuum-swept.
- *Identify and control all onsite sources of dust to minimize stormwater contamination from the deposition of dust on areas exposed to precipitation.*
- *Inspect and maintain bag houses monthly to prevent the escape of dust from the system. Immediately remove any accumulated dust at the base of exterior bag houses.*
 - **Bag House No Longer Used:** Since the removal of the saw in 2013, the bag house is no longer needed or used at the facility.
- *Keep all dumpsters under cover or fit with a lid that must remain closed when not in use.*

The following good housekeeping BMP from the 2014 Manual is not required but recommended:

- *Recycle materials, such as oils, solvents, and wood waste, to the maximum extent possible.*
 - **Recycling:** Oil is recycled at the Facility. Used oil for recycling is stored in an approximately 500-gallon drum on the northern side of Building 628, within the area that drains to the combined sanitary sewer system.

3.1.3 PREVENTIVE MAINTENANCE (S3.B.4.b.i.3)

The following preventive maintenance BMPs are considered applicable in the 2014 Manual and are adhered to at the Facility, unless noted otherwise.

- *Prevent discharge of unpermitted liquid or solid wastes, process wastewater, and sewage to ground or surface water, or to storm drains that discharge to surface water, or to the ground.*
- *Do not connect floor drains in potential pollutant source areas to storm drains, surface water, or to the ground.*
- *Conduct all oily parts cleaning, steam cleaning, or pressure washing of equipment or containers inside a building, or on an impervious contained area, such as a concrete pad. Direct rinse water and contaminated stormwater from such an area to a sanitary sewer where allowed by the local sewer authority, or to other approved treatment.*
 - **Washing:** Parts cleaning (if needed) is conducted indoors. However, if Facility personnel wash vehicles or equipment outdoors in an area that discharges to the stormwater system, they ensure that washing is conducted only where the water will be contained within a catch basin with its outlet drain plugged, and where the washwater will be pumped out to the sanitary sewer system or hauled off site for appropriate treatment. Offsite drainage of wash-water or rinse-water to surface water is not allowed.
- *Do not pave over contaminated soil unless it has been determined that groundwater has not been and will not be contaminated by the soil. Call Ecology for assistance.*
- *Construct impervious areas that are compatible with the materials handled. Portland cement concrete, asphalt, or equivalent material may be considered.*
- *Use drip pans to collect leaks and spills from industrial/commercial equipment such as airplanes, trucks, and other vehicles, which are stored outside.*
- *At industrial and commercial facilities, drain oil and fuel filters before disposal. Discard empty oil and fuel filters, oily rags, and other oily solid waste into appropriately closed and properly labeled containers, and in compliance with the Uniform Fire Code.*
- *For the storage of liquids use containers, such as steel and plastic drums, that are rigid and durable, corrosion-resistant to the weather and fluid content, non-absorbent, watertight, rodent-proof, and equipped with a close fitting cover.*
- *For the temporary storage of solid wastes contaminated with liquids or other potential pollutant materials use dumpsters, garbage cans, drums, and comparable containers, which are durable, corrosion-resistant, non-absorbent, non-leaking, and equipped with either a solid cover or screen cover to prevent littering. If covered with a screen, the container must be stored under a lean-to or equivalent structure.*
- *Where exposed to stormwater, use containers, piping, tubing, pumps, fittings, and valves that are appropriate for their intended use and for the contained liquid.*

In addition to these BMPs from the 2014 Manual, the Permit also specifically requires the following Preventive Maintenance BMPs:

- *Clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe.*
 - **Catch Basins:** See BMPs for the Maintenance of Storm Drain Systems (Section 3.2.3).

- *Inspect all equipment and vehicles during monthly site inspections for leaking fluids such as oil, antifreeze, etc. Take leaking equipment and vehicles out of service or prevent leaks from spilling on the ground until repaired.*
 - **Monthly Inspections:** Qualified personnel conduct and document visual inspections of the site monthly on the monthly inspection form. A blank monthly inspection form, as well as other blank forms, is provided in Appendix C of this SWPPP. Monthly inspection criteria are the same criteria used during stormwater monitoring as described in Section 4.1.1, except that monthly inspections may occur during either storm or non-storm events, in which case monitoring of floating debris, discoloration, etc., associated with stormwater would not apply. However, monthly inspections conducted during a non-storm event may allow the inspector to observe possible illicit discharges.
- *Immediately clean up spills and leaks (e.g., using absorbents, vacuuming, etc.) to prevent the discharge of pollutants.*
 - **Spills:** See Spill Prevention and Emergency Cleanup (Section 3.1.4).

The following preventive maintenance BMP from the 2014 Manual is not required but recommended.

- *Where feasible, store potential stormwater pollutant materials inside a building or under a cover and/or containment.*

3.1.4 SPILL PREVENTION AND CLEANUP (S3.B.4.b.i.4)

The following spill prevention and cleanup BMPs are considered applicable in the 2014 Manual and are adhered to at the Facility and specifically within the facility, unless noted otherwise.

- *Immediately upon discovery, stop, contain, and clean up all spills.*
 - **Spill Prevention:** See Spill Prevention and Emergency Cleanup BMPs below.
- *If pollutant materials are stored on site, have spill containment and cleanup kits readily accessible. Place and maintain emergency spill containment and cleanup kit(s) at outside areas where there is a potential for fluid spills. These kits should be appropriate for the materials being handled and the size of the potential spill.*
 - **Onsite Spill Response Supplies:** See “Spill Kits” below.
 - **Additional Spill Cleanup Assistance:** If a spill cannot be contained on site with available resources, then the Facility will contact a spill response contractor. One such spill response contractor is Clean Harbors, and their 24-hour spill response number is 800-OIL-TANK (800-645-8265). Their local telephone number is 253-639-4240.
- *If the spill has reached or may reach a storm sewer, groundwater, or surface water, notify Ecology immediately. Notification must comply with federal spill reporting requirements. To report a spill or to determine if a spill is a substance of a reportable quantity, call the Ecology regional office and ask for an oil spill operations or a hazardous waste specialist: Northwest Region (425) 649-7000. Ecology requires that oil spills be reported to the National Response Center (1-800-424-8802) and Washington State (1-800-258-5990 or 1-800-OILS-911). Report all non-oil spills to 1-425-649-7000. If the spill has reached or may reach a sanitary or a storm sewer, notify Ecology and the local sewer authority immediately. The local sewer authority is Seattle Public Utilities (206-684-3000).*

Spill Reporting Telephone Numbers:

| | |
|---|----------------------------------|
| Ecology Northwest Region (all spills and information) | (425) 649-7000 |
| National Response Center (oil spills) | 1-800-424-8802 |
| Washington State (oil spills) | 1-800-258-5990 or 1-800-OILS-911 |
| Seattle Public Utilities (spills to sanitary sewer) | (206) 684-3000 |

- *Do not flush absorbent materials or other spill cleanup materials to a storm drain. Collect the contaminated absorbent material as a solid and place in appropriate disposal containers.*

In addition to these BMPs from the 2014 Manual, the Permit also specifically requires the SWPPP to include a Spill Prevention and Emergency Cleanup Plan (SPECPlan). The SPECPlan is presented below and consists of the following required BMPs to prevent spills that can pollute stormwater.

- *Store all chemical liquids, fluids, and petroleum products on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater.*
 - **Spill Containment:** The 300-gallon diesel tank located at the northwest corner of Building 3405 is a double-walled steel tank to provide secondary containment. A short concrete block wall surrounds the tank to provide physical protection from forklift or other impacts.
- *Prevent precipitation from accumulating in containment areas with a roof or equivalent structure or include a plan on how it will manage and dispose of accumulated water if a containment area cover is not practical.*
- *Locate spill kits within 25 feet of all stationary fueling stations, fuel transfer stations, and mobile fueling units. At a minimum, spill kits shall include: i) Oil absorbents capable of absorbing 15 gallons of fuel. ii) A storm drain plug or cover kit. iii) A non-water containment boom, a minimum of 10 feet in length with a 12-gallon absorbent capacity. iv) A non-metallic shovel. v) Two five-gallon buckets with lids.*
 - **Spill Kits:** Oil absorptive materials and spill response equipment are located near the 300-gallon diesel storage tank. Spill kits contain the minimum components listed above and are inspected monthly.
- *Do not lock shut-off fueling nozzles in the open position. Do not "topoff" tanks being refueled. Block, plug, or cover storm drains that receive runoff from areas where fueling, during fueling.*
- *Use drip pans or equivalent containment measures during all petroleum transfer operations.*
- *Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas).*
- *Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible. Drain fluids from equipment and vehicles prior to onsite storage or disposal.*
- *Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason for spill; date/time clean-up completed, notifications made and staff involved.*
 - **Spill Log:** See spill log form in Appendix C.

3.1.5 EMPLOYEE TRAINING (S3.B.4.b.i.5)

The following employee training BMP is considered applicable in the 2014 Manual and is adhered to at the Facility, unless noted otherwise.

- *Train all employees that work in pollutant source areas in identifying pollutant sources to stormwater and in understanding pollutant control measures, spill response procedures, and environmentally acceptable material handling practices, particularly those related to vehicle/equipment liquids such as fuels, and vehicle/equipment cleaning. Use Ecology's "Stormwater Pollution Prevention Planning for Industrial Facilities" (WQ-R-93-015, 9/93) as a training reference.*
 - **Employee Training:** Alaskan Copper provides in-house training at least once per year to applicable personnel. Training includes a review of good housekeeping BMPs, spill response procedures, and material management practices. The training covers these and other contents of this SWPPP and how employees make a difference in stormwater pollution prevention. Alaskan Copper maintains a log documenting training dates and attendees. The training log in Appendix C will be maintained and updated. Training will emphasize the use of environmentally acceptable materials and coatings for any equipment to be used or stored outdoors in areas where stormwater runoff enters the storm sewer rather than the sanitary sewer. The selection of appropriate materials includes paints, fencing, storage racks, roofing, and other equipment, so that use of materials containing zinc or copper will be reduced and eliminated to the extent practical. Acceptable materials would include epoxy or other non-metal paints for outdoor structures and non-galvanized storage racks or other outdoor structures. Also, as outdoor materials age and need to be replaced (such as facility roofing where apparent copper and zinc sources have been identified) to replace that material with products that will not be a source of copper or zinc to stormwater.

3.1.6 INSPECTIONS AND RECORDKEEPING (S3.B.4.b.i.6)

The following inspection and recordkeeping BMPs are considered applicable in the 2014 Manual and are adhered to at Alaskan Copper, unless noted otherwise.

- *Verify that the descriptions of the pollutant sources identified in the stormwater pollution control program are accurate.*
 - **Pollutant Source Inspections:** As an active Facility, near-daily observations will be made by the pollution prevention team regarding the status of potential pollutant sources at the Facility. This SWPPP will be updated if new potential sources are identified and if existing potential sources are eliminated.
- *Verify that the stormwater pollutant controls (BMPs) being implemented are adequate.*
 - **BMP Inspections:** This verification will be made by comparing stormwater monitoring results to benchmark values (see Section 4.4) and through near-daily observations of Facility BMPs by the pollution prevention team and other Facility personnel. In addition, BMPs will be visually inspected monthly. The BMP visual inspections will be documented on the monthly inspection form provided in Appendix C.
- *Update the site map to reflect current conditions.*

- The Site Map (Figure 2) will be updated as appropriate to show changes to the Facility that may impact stormwater discharges.
- *Include observations of the presence of floating materials, suspended solids, oil and grease, discoloration, turbidity, and odor in the stormwater discharges; in outside vehicle maintenance/repair areas; and liquid handling and storage areas. In areas where acid or alkaline materials are handled or stored, use a simple litmus or pH paper to identify those types of stormwater contaminants where needed. See procedures presented in Section 4.0 for conducting this inspection.*
 - **Stormwater Observations:** These observations will be made a part of the monthly visual monitoring as described in Section 4.1.1.
- *Determine whether there is/are unpermitted non-stormwater discharges to storm drains or receiving waters, such as process wastewater and vehicle/equipment washwater, and either eliminate or obtain a permit for such a discharge.*
 - **Unpermitted Non-stormwater Discharges:** This determination will be made as part of the monthly inspections described in Section 4. Completed Monthly inspection forms will be maintained in Appendix D. Blank forms are provided in Appendix C. If Alaskan Copper identifies an unpermitted discharge, it will eliminate or obtain a permit for the discharge.

Recordkeeping BMPs require that the following reports be retained for five years:

- *Visual inspection reports (as described in Section 4.1.1), which should include: scope of the inspection, the personnel conducting the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP (performance of the BMPs, etc.), and actions taken to correct BMP inadequacies.*
 - **Recordkeeping:** Forms required as part of this SWPPP, including Maintenance records, monthly inspection forms, Annual reports, training records, DMRs, Spill logs and SWPPP certification forms will be maintained in Appendix D. All records associated with Appendix D will be kept digitally and are available upon request. Blank forms are also provided in Appendix C.
- *Reports on spills of oil or hazardous substances in greater than reportable quantities (CFR Title 40 Parts 302.4 and 117), including the following: oil, gasoline, or diesel fuel that causes a violation of the State of Washington's Water Quality Standards, a film or sheen upon or discoloration of the waters of the state or adjoining shorelines, or a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.*
 - **Spill Event Recordkeeping:** Alaskan Copper will record any spill event on the ACW Spill Log (Appendix D) and maintain that record for at least 5 years.

Additional records that must be kept by the pollution prevention team include the following:

- *Stormwater monitoring records (see Section 4.2).*
- *Employee training logs (see Section 3.1.5).*

Required records will be maintained in Appendix D of this SWPPP.

3.2 STRUCTURAL SOURCE CONTROL AND OPERATIONAL BEST MANAGEMENT PRACTICES BY INDUSTRIAL ACTIVITY (S3.B.4.b.ii)

This section describes structural source control BMPs and operational BMPs considered applicable in the 2014 Manual and used by the Facility for specific industrial activities within the Facility (treatment BMPs are also included for specific industrial activities where applicable). In addition, the specific industrial activities listed below are also required by the Permit to include the following structural source control BMPs to minimize the exposure of manufacturing, processing, and material storage areas to precipitation and runoff:

- *Use grading, berming, or curbing to prevent runoff of contaminated flows and divert runoff away from manufacturing, processing, and material storage areas.*
- *Perform all cleaning operations indoors, under cover, or in bermed areas that prevent stormwater runoff and runoff and capture any overspray. Drain washwater to a collection system for further treatment of storage.*

3.2.1 BMPs FOR FUELING AT DEDICATED STATIONS

This section describes the applicable BMPs for fueling at dedicated stations.

General Description of Potential Pollutant Sources: *A fueling station is a facility dedicated to the transfer of fuels from a stationary pumping station to mobile vehicles or equipment. It includes above or under-ground fuel storage facilities. In addition to general service gas stations, fueling may also occur at 24-hour convenience stores, construction sites, warehouses, car washes, manufacturing establishments, port facilities, and businesses with fleet vehicles. Typically, stormwater contamination at fueling stations is caused by leaks/spills of fuels, lube oils, radiator coolants, and vehicle washwater.*

- **Applicability at Facility:** Alaskan Copper maintains a 300-gallon diesel tank near the northwest corner of Building 3405.

3.2.1.1 Operational BMPs for Fueling at Dedicated Stations

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Prepare an emergency spill response and cleanup plan (per BMPs for Spills of Oil and Hazardous Substances) and have designated trained person(s) available either on site or on call at all times to promptly and properly implement that plan and immediately cleanup all spills. Keep suitable cleanup materials, such as dry adsorbent materials, on site to allow prompt cleanup of a spill.*
 - **Spill Prevention and Cleanup:** See Section 3.1.4 for spill prevention and cleanup BMPs as part of the SPEC.
- *Train employees on the proper use of fuel dispensers. Post signs in accordance with the Uniform Fire Code (UFC). Post “No Topping Off” signs (topping off gas tanks causes spillage and vents gas fumes to the air). Make sure that the automatic shutoff on the fuel nozzle is functioning properly.*

- *The person conducting the fuel transfer must be present at the fueling pump during fuel transfer, particularly at unattended or self-serve stations.*
- *Keep drained oil filters in a suitable container or drum.*

3.2.1.2 Structural BMPs for Fueling at Dedicated Stations

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Design the fueling island to control spills (dead-end sump or spill control separator in compliance with the UFC), and to treat collected stormwater and/or wastewater to required levels. Slope the concrete containment pad around the fueling island toward drains; either trench drains, catch basins and/or a dead-end sump. The slope of the drains shall not be less than 1 percent (Section 7901.8 of the UFC). Drains to treatment shall have a shutoff valve, which must be closed in the event of a spill. The spill control sump must be sized in compliance with Section 7901.8 of the UFC; or*
- *Design the fueling island as a spill containment pad with a sill or berm raised to a minimum of four inches (Section 7901.8 of the UFC) to prevent the runoff of spilled liquids and to prevent run-on of stormwater from the surrounding area. Raised sills are not required at the open-grate trenches that connect to an approved drainage-control system.*
 - **Drainage of Fueling Area:** The 300-gallon diesel tank is provided with double-wall secondary containment. However, the fueling area does not have a containment berm or drain to a dead-end sump. The catch basins in the area of the diesel tank have a downward facing underflow pipe that would act to contain a small volume of spilled floating diesel. That feature, in addition to the spill response kit and procedures described in Section 3.1.4, is deemed adequate for this infrequently used fueling station. However, Alaskan Copper will give future consideration to installation of a containment berm and/or a larger volume dead-end containment sump.
- *The fueling pad must be paved with Portland cement concrete, or equivalent. Asphalt is not considered an equivalent material.*
- *The fueling island must have a roof or canopy to prevent the direct entry of precipitation onto the spill containment pad. The roof or canopy should, at a minimum, cover the spill containment pad (within the grade break or fuel dispensing area) and preferably extend several additional feet to reduce the introduction of windblown rain. Convey all roof drains to storm drains outside of the fueling containment area.*
 - **Covering of fueling pad:** The small 300-gallon diesel tank is used infrequently and is not provided with a roof or canopy. Oil sheen has not been observed in this area in the many past years of Facility visual monitoring. A future upgrade or relocation of the diesel tank to an area under cover may be considered if future problems are found with visible oil sheens in stormwater.
- *Stormwater collected on the fuel island containment pad must be conveyed to a sanitary sewer system, if approved by the sanitary authority; or to an approved treatment system such as an oil/water separator and a basic treatment BMP (Basic treatment BMPs are listed in Volume V and include media filters and biofilters). Discharges from treatment systems to storm drains or surface water or to the ground must not display ongoing or recurring visible sheen and must not contain greater than a significant amount of oil and grease. Alternatively, stormwater*

collected on the fuel island containment pad may be collected and held for proper off site disposal.

- *Conveyance of any fuel-contaminated stormwater to a sanitary sewer must be approved by the local sewer authority and must comply with pretreatment regulations (WAC 173-216-060). These regulations prohibit discharges that could "cause fire or explosion." An explosive or flammable mixture is defined under state and federal pretreatment regulations, based on a flash point determination of the mixture. If contaminated stormwater is determined not to be explosive, then it could be conveyed to a sanitary sewer system.*
- *Transfer the fuel from the delivery tank trucks to the fuel storage tank in impervious contained areas and ensure that appropriate overflow protection is used. Alternatively, cover nearby storm drains during the filling process and use drip pans under all hose connections.*
- *If a roof or canopy is impractical the concrete fueling pad must be equipped with emergency spill control, which includes a shutoff valve for the drainage from the fueling area. The valve must be closed in the event of a spill. An electronically actuated valve is preferred to minimize the time lapse between spill and containment. Spills must be cleaned up and disposed off-site in accordance with BMPs for Spills of Oil and Hazardous Substances.*
 - **Drainage of Fueling Area:** As indicated above, a roof is considered impractical. An emergency spill control shutoff valve is not currently provided at the fueling area. Alaskan Copper will further consider installing an emergency shutoff valve for this area.
- *The valve may be opened to convey contaminated stormwater to a sanitary sewer, if approved by the sewer authority, or to oil removal treatment such as an API or CP oil/water separator, catchbasin insert, or equivalent treatment, and then to a basic treatment BMP. Discharges from treatment systems to storm drains or surface water or to the ground must not display ongoing or recurring visible sheen and must not contain greater than a significant amount of oil and grease.*

3.2.2 BMPs FOR LOADING AND UNLOADING AREAS FOR LIQUID OR SOLID MATERIAL

This section describes the applicable BMPs for loading and unloading areas for liquid or solid material.

General Description of Potential Pollutant Sources: *Loading/unloading of liquid and solid materials at industrial and commercial facilities is typically conducted at shipping and receiving, outside storage, fueling areas, etc. Transferred materials can include products, raw materials, intermediate products, waste materials, fuels, scrap metals, etc. Leaks and spills of fuels, oils, powders, organics, heavy metals, salts, acids, alkalis, etc. during transfer are potential causes of stormwater contamination. Spills from hydraulic line breaks are a common problem at loading docks.*

- **Applicability at Facility:** The Alaskan Copper Facility loads and unloads liquid and solid materials. A 300-gallon diesel tank is located near the northwest corner of Building 3405.

3.2.2.1 Operational BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *A significant amount of debris can accumulate at outside, uncovered loading/unloading areas. Sweep these surfaces frequently to remove material that could otherwise be washed away by*

stormwater. Sweep outside areas that are covered for a period of time by containers, logs, or other material after the areas are cleared.

– **Sweeping:** See Section 3.1.2.

- *Place drip pans, or other appropriate temporary containment device, at locations where leaks or spills may occur such as hose connections, hose reels, and filler nozzles. Drip pans shall always be used when making and breaking connections. Check loading/unloading equipment such as valves, pumps, flanges, and connections regularly for leaks and repair as needed.*
- *To minimize the risk of accidental spillage, prepare an Operations Plan that describes procedures for loading/unloading. Train the employees, especially forklift operators, in its execution and post it or otherwise have it readily available to employees.*
- *Report spills of reportable quantities to Ecology.*
- *Prepare and implement an Emergency Spill Cleanup Plan for the facility (BMP Spills of Oil and Hazardous Substances).*

3.2.2.2 Structural BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *At all loading/unloading areas: Consistent with Uniform Fire Code requirements (Appendix IV-D R.2) and to the extent practicable, conduct unloading or loading of solids and liquids in a manufacturing building, under a roof, or lean-to, or other appropriate cover.*
- *Berm, dike, and/or slope the loading/unloading area to prevent run-on of stormwater and to prevent the runoff or loss of any spilled material from the area.*
- *Large loading areas frequently are not curbed along the shoreline. As a result, stormwater passes directly off the paved surface into surface water. Place curbs along the edge or slope the edge such that the stormwater can flow to an internal storm drain system that leads to an approved treatment BMP.*
- *Pave and slope loading/unloading areas to prevent the pooling of water. The use of catch basins and drain lines within the interior of the paved area must be minimized as they will frequently be covered by material, or they should be placed in designated "alleyways" that are not covered by material, containers, or equipment.*

3.2.3 BMPs FOR MAINTENANCE OF STORMWATER DRAINAGE AND TREATMENT SYSTEMS

This section describes the operational BMPs for maintenance of stormwater drainage and treatment systems.

General Description of Pollutant Sources: *Facilities include roadside catch basins on arterials and within residential areas, conveyance systems, detention facilities such as ponds and vaults, oil and water separators, biofilters, settling basins, infiltration systems, and all other types of stormwater treatment systems presented in Volume V (of the Stormwater Management Manual). Roadside catch basins can remove from 5 to 15 percent of the pollutants present in stormwater. When catch basins are about 60 percent full of sediment, they cease removing sediments. Oil and grease, hydrocarbons, debris, heavy*

metals, sediments and contaminated water are found in catch basins, oil and water separators, settling basins, etc.

- **Applicability at Facility:** The Facility maintains catch basins and stormwater conveyance piping.

3.2.3.1 Operational and Structural BMPs

The following BMPs are adhered to at the Facility, unless noted otherwise.

- *Inspect and clean treatment BMPs, conveyance systems, and catch basins as needed, and determine whether improvements in operations and maintenance (O&M) are needed.*
 - **Catch Basins:** The facility has 15 catch basins that ultimately discharge to stormwater. Catch basin inserts are installed in all facility catch basins. Catch basins are inspected during the monthly inspections for sediment accumulation and integrity of the catch basin insert. Additional catch basins within the facility discharges to the combined sanitary sewer. Notes are to be recorded on the monthly inspection form if O&M improvements are needed.
- *Promptly repair any deterioration threatening the structural integrity of the facilities. These include replacement of cleanout gates, catch basin lids, and rock in emergency spillways.*
 - **Storm Drain Blockage:** If catch basins or storm drains are observed to not drain properly and contribute to turbidity and suspended solids, then inspect drain lines for debris or sediment blockage or broken piping. Clean and repair or replace storm drain lines as necessary to restore proper drainage.
- *Ensure that storm sewer capacities are not exceeded and that heavy sediment discharges to the sewer system are prevented.*
- *Regularly remove debris and sludge from structural BMPs used for peak-rate control, treatment, etc., and discharge to a sanitary sewer, if approved by the sewer authority, or truck to a local or state government-approved disposal site.*
- *Clean catch basins when the depth of deposits reaches 60 percent of the sump depth as measured from the bottom of the basin to the invert of the lowest pipe into or out of the basin. However, in no case should there be less than 6 inches clearance from the debris surface to the invert of the lowest pipe. Some catch basins (for example, Washington State Department of Transportation Type 1L basins) may have as little as 12 inches sediment storage below the invert. These catch basins will need more frequent inspection and cleaning to prevent scouring. Where these catch basins are part of a stormwater collection and treatment system, the system owner/operator may choose to concentrate maintenance efforts on downstream control devices as part of a systems approach.*
- **Catch Basins:** Facility catch basins are cleaned out as described above. Catch basin solids cleanout is typically done annually, which ends up being more often than needed to maintain solids levels below that indicated above. In 2018, catch basins will be maintained quarterly unless inspection shows that no solids are present in the sumps. *Clean woody debris in a catch basin as frequently as needed to ensure proper operation of the catch basin.*
- *Post warning signs; “Dump No Waste – Drains to Groundwater,” “Streams,” “Lakes,” or emboss on or adjacent to all storm drain inlets where practical.*
- *Disposal of sediments and liquids from the catch basins must comply with “Recommendations for Management of Street Wastes” from Appendix IV-G of the Stormwater Management Manual for Western Washington, available online at: <http://www.ecy.wa.gov/pubs/9914.pdf>.*

3.2.4 BMPs FOR ROOF/BUILDING DRAINS AT MANUFACTURING BUILDINGS

This section describes the operational BMPs for roof/building drains at manufacturing and commercial buildings.

General Description of Pollutant Sources: *Stormwater runoff from roofs and sides of manufacturing and commercial buildings can be sources of pollutants caused by leaching of roofing materials, building vents, and other air emission sources. Vapors and entrained liquid and solid droplets/particles have been identified as potential pollutants in roof/building runoff. Metals, solvents, acidic/alkaline pH, BOD, and organics, are some of the pollutant constituents identified.*

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *If leachate and/or emissions from buildings are suspected sources of stormwater pollutants, then sample and analyze the stormwater draining from the building. If a roof/building stormwater pollutant source is identified, implement appropriate source control measures such as air pollution control equipment, selection of materials, operational changes, material recycle, process changes, etc.*
 - **Downspout filters have been provided at select roof drain downspouts in the past. See also, emphasis on environmentally acceptable material (i.e., not containing leachable copper or zinc) in Section 3.1.5.**

3.2.5 BMPs FOR STORAGE OF LIQUIDS OR DANGEROUS WASTE CONTAINERS (OUTSIDE)

This section describes the BMPs required for Storage of Liquids, Food Wastes, or Dangerous Waste Containers (Outside).

General Description of Potential Pollutant Sources. *Steel and plastic drums with volumetric capacities of 55 gallons or less are typically used at industrial facilities for container storage of liquids and powders. The BMPs specified below apply to container(s) located outside a building used for temporary storage of accumulated food wastes, vegetable or animal grease, used oil, liquid feedstock or cleaning chemical, or Dangerous Wastes (liquid or solid) unless the business is permitted by Ecology to store the wastes. Leaks and spills of pollutant materials during handling and storage are the primary sources of pollutants. Oil and grease, acid/alkali pH, BOD, COD are potential pollutant constituents.*

- **Applicability at Alaskan Copper:** There is no storage of liquids, food waste, or dangerous waste containers in containers stored outdoors within the identified stormwater drainage area (with the exception of the 300-gallon diesel tank discussed separately). The BMPs are provided in this section in the event that temporary storage of liquids or dangerous wastes may need to occur in the future.

3.2.5.1 Operational BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Place tight-fitting lids on all containers.*

- *Place drip pans beneath all mounted container taps and at all potential drip and spill locations during filling and unloading of containers.*
- *Inspect container storage areas regularly for corrosion, structural failure, spills, leaks, overfills, and failure of piping systems. Check containers daily for leaks/spills. Replace containers, and replace and tighten bungs in drums as needed.*
- *Businesses accumulating Dangerous Wastes that do not contain free liquids need only to store these wastes in a sloped designated area with the containers elevated or otherwise protected from storm water run-on.*
- *Drums stored in an area where unauthorized persons may gain access must be secured in a manner that prevents accidental spillage, pilferage, or any unauthorized use.*
- *Storage of reactive, ignitable, or flammable liquids must comply with the Uniform Fire Code.*
- *Cover dumpsters, or keep them under cover such as a lean-to, to prevent the entry of stormwater. Replace or repair leaking garbage dumpsters.*
- *Drain dumpsters and/or dumpster pads to sanitary sewer. Keep dumpster lids closed. Install waterproof liners.*

3.2.5.2 Structural BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Keep containers with Dangerous Waste, food waste, or other potential pollutant liquids inside a building unless this is impracticable due to site constraints or Uniform Fire Code requirements.*
- *Store containers in a designated area, which is covered, bermed or diked, paved and impervious in order to contain leaks and spills. The secondary containment shall be sloped to drain into a dead-end sump for the collection of leaks and small spills.*
- *For liquid wastes, surround the containers with a dike. The dike must be of sufficient height to provide a volume of either 10 percent of the total enclosed container volume or 110 percent of the volume contained in the largest container, whichever is greater, or, if a single container, 110 percent of the volume of that container.*
- *Where material is temporarily stored in drums, a containment system can be used.*
- *Place containers mounted for direct removal of a liquid chemical for use by employees inside a containment area as described above. Use a drip pan during liquid transfer.*
- *Include a tank overfill protection system to minimize the risk of spillage during loading.*

3.2.6 BMPs FOR STORAGE OF LIQUIDS IN PERMANENT ABOVEGROUND TANKS

This section describes the operational, structural, and treatment BMPs for the storage of liquids in permanent aboveground storage tanks.

General Description of Pollutant Sources: *Above-ground tanks containing liquids (excluding uncontaminated water) may be equipped with a valved drain, vent, pump, and bottom hose connection. They may be heated with steam heat exchangers equipped with steam traps. Leaks and spills can occur at*

connections and during liquid transfer. Oil and grease, organics, acids, alkalis, and heavy metals in tank water and condensate drainage can also cause stormwater contamination at storage tanks.

- **Applicability at the Facility:** The 300-gallon diesel tank located near the northwest corner of Building 3405 is a double-walled steel tank to provide secondary containment. A short concrete block wall surrounds the tank to provide physical protection from forklift or other impacts.

3.2.6.1 Operational BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Inspect the tank containment areas regularly to identify problem components such as fittings, pipe connections, and valves, for leaks/spills, cracks, corrosion, etc.*
- *Place adequately sized drip pans beneath all mounted taps and drip/spill locations during filling/unloading of tanks. Valved drain tubing may be needed in mounted drip pans.*
- *Sweep and clean the tank storage area regularly, if paved.*
- *Replace or repair tanks that are leaking, corroded, or otherwise deteriorating.*
- *All installations shall comply with the Uniform Fire Code and the National Electric Code.*
- *If the tank containment area is uncovered, equip the outlet from the spill-containment sump with a shutoff valve, which is normally closed and may be opened, manually or automatically, only to convey contaminated stormwater to approved treatment or disposal, or to convey uncontaminated stormwater to a storm drain. Evidence of contamination can include the presence of visible sheen, color, or turbidity in the runoff, or existing or historical operational problems at the facility. Simple pH measurements with litmus or pH paper can be used for areas subject to acid or alkaline contamination.*

3.2.6.2 Structural BMPs

The following BMPs are required by the Permit and are adhered to at the Facility, unless noted otherwise:

- *Locate permanent tanks in impervious (Portland cement concrete or equivalent) secondary containment areas surrounded by dikes or UL-approved double-walled tanks. The dike must be of sufficient height to provide a containment volume of either 10 percent of the total enclosed tank volume or 110 percent of the volume contained in the largest tank, whichever is greater, or, if a single tank, 110 percent of the volume of that tank.*
- **Secondary Containment:** The 300-gallon diesel tank is of double-wall steel construction to provide secondary containment. The concrete wall around this tank was installed for added physical protection.
- *Slope the secondary containment to drain to a dead-end sump (optional), or equivalent, for the collection of small spills.*
- *Include a tank overflow protection system to minimize the risk of spillage during loading.*

3.2.7 BMPs FOR URBAN STREETS

This section describes the recommended BMPs for urban streets.

General Description of Pollutant Sources: *Streets can be the sources of vegetative debris, paper, fine dust, vehicle liquids, tire wear residues, heavy metals (lead and zinc), soil particles, ice control salts, domestic wastes, lawn chemicals, and vehicle combustion products. Street surface contaminants have been found to contain significant concentrations of particle sizes less than 250 microns.*

- **Applicability at the Facility:** An urban street (6th Avenue South) runs north-south and separates the Alaskan Copper Facility.

3.2.7.1 Recommended BMPs for Urban Streets

The following BMPs are recommended, but not required, and could potentially help reduce turbidity, zinc, and other pollutants from entering the Facility stormwater system.

- *For maximum stormwater pollutant reductions on curbed streets and high volume parking lots use efficient vacuum sweepers (refer to Volume V, Ch. 12, for information about an emerging high-efficiency vacuum sweeper technology). Note: High-efficiency street sweepers utilize strong vacuums and the mechanical action of main and gutter brooms combined with an air filtration system that only returns clean air to the atmosphere (i.e., filters very fine particulates). They sweep dry and use no water since they do not emit any dust. It has been reported that high-efficiency vacuum sweepers have the capability of removing, from pavements under good condition, 80 percent or more of the accumulated street dirt particles whose diameters are less than 250 microns. This assumes pavements under good condition and reasonably expected accumulation conditions.*
- *For moderate stormwater pollutant reductions on curbed streets use regenerative air sweepers or tandem sweeping operations. Note: A tandem sweeping operation involves a single pass of a mechanical sweeper followed immediately by a single pass of a vacuum sweeper or regenerative air sweeper. A regenerative air sweeper blows air down on the pavement to entrain particles and uses a return vacuum to transport the material to the hopper. These operations usually use water to control dust. This reduces their ability to pick up fine particulates. It has been reported that these types of sweepers have the capability of removing approximately 25 to 50 percent of the accumulated street dirt particles whose diameters are less than 250 microns. This assumes pavements under good conditions and typical accumulation conditions.*
- *For minimal stormwater pollutant reductions on curbed streets use mechanical sweepers. Note: Mechanical sweepers are referred to as broom sweepers and use the mechanical action of main and gutter brooms to throw material on a conveyor belt that transports it to the hopper. These sweepers usually use water to control dust. This reduces their ability to pick up fine particulates. It has been reported that mechanical sweepers have the capability of removing only 10 to 20 percent of the accumulated street dirt particles whose diameters are less than 250 microns. This assumes pavements under good condition and the most favorable accumulation conditions.*
- *Conduct sweeping at optimal frequencies. Optimal frequencies are those scheduled sweeping intervals that produce the most cost effective annual reduction of pollutants normally found in stormwater and can vary depending on land use, traffic volume, and rainfall patterns.*

- *Train operators in those factors that result in optimal pollutant removal. These factors include sweeper speed, brush adjustment and rotation rate, sweeping pattern, maneuvering around parked vehicles, and interim storage and disposal methods.*
- *Establish programs for prompt sweeping, removal, and disposal of debris from special events that will generate higher than normal loadings.*
- *Disposal of street sweeping solids must comply with "Recommendations for Management of Street Wastes" described in Appendix IV-G of the SWMMWW.*

3.3 TREATMENT BEST MANAGEMENT PRACTICES (S3.B.4.b.iii)

Stormwater treatment BMPs were installed at the facility in 2010 and 2011 and expanded stormwater treatment BMPs installed at the facility in September 2013. These BMPs include downspout filtration units installed on the downspouts of 3405 and 3317. Stormwater treatment improvements were also previously made as described in the 2015 engineering report. This included MetalZorb® media installed in the DP-07 catch basin (which is no longer an active BMP). Based on unexpectedly still exceeding benchmarks in 2016, an engineering report for a new stormwater treatment system was completed in May 2017. The engineering report was not implemented in 2017 as ACW and the Puget Soundkeeper Alliance entered a consent decree where a new engineering report was submitted to the department of Ecology in May 2018 requiring treatment for all industrial stormwater basins east of 6th Ave S. The engineering report was approved by the department of Ecology on June 20, 2018 and the treatment system was fully operational by November 12, 2018. A copy of the approval letter from the department of Ecology is provided in Appendix E

A centralized stormwater treatment system located along the southwest corner of the 3200 warehouse has the design capacity of 155-gpm to treat the water quality flow rate of basins D01, D02, D03, D04, and D07. A portion of the D95 basin was converted to basin D07 for treatment during construction. Three lift stations are installed to collect and pump the runoff to the treatment system. The design flow rates and contributing area is in the table below:

| Lift Station Basin | ACW Drainage Basin | Lift Station Basin Acreage | Water Quality Offline Flow Rate (gpm) | Lift Station Flow Rate (gpm) |
|--------------------|--------------------|----------------------------|---------------------------------------|------------------------------|
| North | D01, D02 | 0.518 | 20.51 | 22 |
| Central | D03, D04 | 2.30 | 94.74 | 95 |
| South | D07, D95 | 0.910 | 37.47 | 38 |

All stormwater from the three lift stations is pumped to a 10,000 gallon above ground storage tank where pH is continuously monitored. NaOH is injected into the influent of the tank to raise the pH to 8.5, allowing dissolved metals to precipitate for at least 1 hour. Solids settle primarily in this tank as well. The water then gravity flows into a second 10,000 gallon above ground storage tank where a level transducer

activates the treatment system pump. Water is pumped through a 5-micron bag filter and then through a lead-lag granular activated carbon (GAC) adsorptive media vessels. Refer to the Operation and Maintenance Manual for information on equipment, operating procedures and maintenance guidelines. The Operation and Maintenance Manual should always be available onsite.

3.4 STORMWATER PEAK RUNOFF AND VOLUME CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.iv)

The Alaskan Copper Facility is believed to have been constructed in accordance with stormwater drainage rules in effect at the time of construction or Facility expansions. The receiving waters for stormwater runoff from the Facility that does not drain to the combined sanitary sewer system are the lower Duwamish Waterway and the East Waterway, which are large water bodies that are not subject to flow control limitations. Alaskan Copper is not required to nor maintains peak runoff and volume control BMPs, however a 10,000 gallons storage tank on the treatment system does offer some storm attenuation.

3.5 EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (S3.B.4.b.v)

BMP options for soil erosion and sediment control at industrial sites are listed below:

- *Plant vegetative cover, such as grass, trees, and shrubs, on erodible soil areas. Cover with mats, such as clear plastic, jute, and synthetic fiber. Preserve natural vegetation, including grass, trees, shrubs, and vines.*
- *Maintain vegetated swale, dike, silt fence, check dam, gravel filter berm, sedimentation basin, and proper grading.*
 - **Soil Erosion and Sediment Control:** Alaskan Copper does not perform industrial activities on unpaved areas.

4.0 STORMWATER MONITORING PLAN (S3.B.5)

The Permit requires the facility to conduct and document visual inspections of the site and to sample and test representative stormwater discharges at least once per quarter from designated outfalls. Specific stormwater monitoring requirements are presented below. Eight consecutive quarters of meeting benchmark value for a parameter is required to achieve consistent attainment. After achieving consistent attainment for a parameter, sampling for that parameter can be discontinued for a period of three years.

4.1 MONITORING LOCATIONS, REQUIREMENTS, AND METHODS

In accordance with Permit Condition S7, qualified personnel are to conduct and document a visual inspection of the site each month. Each inspection shall include observations made at locations where stormwater associated with industrial activity is discharged off site to waters of the state or to a storm sewer system that drains to waters of the state. For the Alaskan Copper Facility, those locations are identified in the updated facility map. The results of each inspection are to be recorded on the Monthly Inspection Form (Appendix D), and these completed forms are to be kept on site for Ecology review.

The ISGP requires that stormwater samples be collected and tested quarterly from location(s) that are representative of stormwater being discharged from the facility. As of July 2010, the industrial operations in Building 3223 and the north half of Building 3301 were relocated to the Kent facility. As of December 2014 the industrial operations in Building 3317 and the area south of Building 3317 have been relocated or discontinued, and that building is leased to another company. The drainage area south of former Building 3317 had a stormwater monitoring location, and that location was catch basin CB331707. In December 2014, Alaskan Copper submitted a Discharge/Sample Point Update Form that requested removal of sampling location CB331707 given that Alaskan Copper no longer has any operations in that area. Stormwater samples at Alaskan Copper were formerly collected from catch basin CB330001, as that is located in an area where industrial activity formerly occurred and where stormwater discharges to the City of Seattle storm drain system rather than to the sanitary sewer. However, starting in 3rd quarter 2016 the stormwater monitoring location was moved east of CB 330001 to upstream catch basin CB330002 (DP-07), because as of that time that portion of the property had been fully leased to another company and fully occupied and maintained by that business operation. Starting in the 2nd quarter of 2018, sampling was conducted at multiple locations at the facility (DP-01, DP-03, DP-07, and DP-10). A centralized treatment system was installed November 2018 which consolidated outfalls DP-01, DP-02, DP-03, DP-04, DP-07 and a portion of the DP 9.5 drainage basins. The treated effluent for all industrial stormwater basins east of 6th Ave S discharges at outfall DP-03. DP-10, west of 6th Ave S is the facility's only active outfall west of 6th Ave S. Sampling of stormwater must be performed according to the following Permit criteria:

- Sampling of the stormwater discharge is to be conducted at least once per quarter:
1st Quarter = January, February, and March
2nd Quarter = April, May, and June
3rd Quarter = July, August, and September
4th Quarter = October, November, and December
- Sample the stormwater discharge from the first fall storm event each year. “First fall storm event” means the first time after October 1 of each year that precipitation occurs and results in a stormwater discharge from a facility. The first fall storm event sample will complete the requirement to take a 4th Quarter sample.
- Collect samples within the first 12 hours of stormwater discharge events. If it is not possible to collect a sample within the first 12 hours of a stormwater discharge event, Facility personnel must collect the sample as soon as practicable after the first 12 hours and keep documentation with the sampling records explaining why sampling could not occur within the first 12 hours.
- Sampling need not be performed outside of regular business hours, during unsafe conditions (e.g., during thunderstorms), or during quarters where there is no discharge.

To efficiently comply with these criteria (especially the first fall sampling event), attention must be paid to weather forecasts in order to anticipate when stormwater discharge will first occur at the designated discharge location.

4.1.1 METHODS FOR VISUAL INSPECTIONS

Visual inspections include assessments of BMPs, and observations for the presence of non-permitted stormwater discharges, floating materials, visible sheen, discoloration, turbidity, or odor in the stormwater discharge at the sampling point. Visual inspection results will be recorded on the monthly inspection form provided in Appendix C and maintained in Appendix D. These completed forms, referred to in the Permit as visual inspection reports, must be signed by the person making the observations as well as by Alaskan Copper’s Responsible Official or other duly authorized representative of the Facility (as described in Condition G.2a of the Permit). The form includes a certification that the Facility is in compliance or non-compliance with the SWPPP and the Permit. If the Facility inspection indicates that the requirements of the SWPPP or the Permit are not being met, the monthly inspection form must include a summary of the actions that will be taken to meet these requirements. See Section S9.E of the Permit for instructions on reporting incidents of non-compliance.

4.1.2 METHODS FOR STORMWATER SAMPLING

Stormwater samples will be collected from the designated outfall sampling locations:

DP-03 – Sample spigot on effluent side of treatment system.

Open sampling spigot and let flush for at least 15 seconds prior to filling sample bottles.

DP-10 – Where drainage system enters manhole on 6th Ave S, east of 3405 building

Using a peristaltic pump, place suction side of tubing into water stream of the east inlet of the manhole. Pay careful attention to not comingle flow from 6th Ave S. Let pump flush through tubing for at least 1 minute prior to filling sample bottles.

Additional sampling protocols are listed on pages 9 and 10 of the Ecology guidance on sampling, accessible through the following link: (<http://www.ecy.wa.gov/pubs/0210071.pdf>).

According to the Permit requirements for this type of industrial facility, stormwater will be sampled once per quarter for the parameters listed below.

| Parameter | Units | Container | Preservative | Analytical Method (Holding time) | Benchmark Value | Laboratory Quantification Level |
|------------------------------|--------|---|--|--|---------------------------------------|---------------------------------------|
| Turbidity | NTU | 500mL polyethylene bottle | None if field meter, or cool to 4°C if not brought directly to lab | Field meter or meter in lab. EPA 180.1 (48 hours) | 25 NTU | 0.5 |
| pH | SU | Disposable cup | None, measure immediately | Meter or pH paper in field. pH paper within +/- 0.5 SU or less. Measure immediately. | 5-9 SU | +/- 0.5 |
| Oil Sheen | Yes/No | N/A | N/A | N/A | No visible oil sheen | N/A |
| Total Copper | µg/L | 500 mL polyethylene bottle with acid preservative | HNO ₃ , cool to 4°C if not brought directly to lab | EPA Method 200.8 in lab (6 months) | 14 µg/L | 2.0 |
| Total Zinc | µg/L | 500 mL polyethylene bottle with acid preservative | HNO ₃ , cool to 4°C if not brought directly to lab | EPA Method 200.8 in lab (6 months) | 117 µg/L | 2.5 |
| Total Lead | µg/L | 500 mL polyethylene bottle with acid preservative | HNO ₃ , cool to 4°C if not brought directly to lab | EPA Method 200.8 in lab (6 months) | 81.6 µg/L | 0.5 |
| Total Suspended Solids (TSS) | mg/L | 1 liter HDPE | None | 303(d)/Puget Sound Sediment Cleanup | 30 mg/L LIMIT starts 1/1/17 | 5 |
| Petroleum Hydrocarbons | mg/L | Two 500 mL amber glass bottles | None, cool to 4°C if not brought directly to lab | NWTPH-Dx | 10 mg/L | 0.1 |

NTU = nephelometric turbidity unit

mL = milliliter

mg/L = milligrams per liter

µg/L = microgram per liter

SU = standard unit

EPA = U.S. Environmental Protection Agency

N/A = not applicable

This Facility is now listed in Appendix 4 of the Industrial Stormwater General Permit [which is the list of permittees that discharge pollutants of concern to a 303(d)-listed water body]. Therefore, this Facility

needs to sample for total suspended solids (TSS) as included in the table above. A copy of the Permit coverage letter from Ecology, which clarifies sampling requirements, is provided in Appendix B.

Sampling requires filling appropriate containers as described above. The laboratory can provide a cooler with all the necessary sample collection jars upon request. It is recommended that a cooler with collection jars be kept on site ahead of time in preparation for qualifying rain events. The Permittee has the option of measuring pH and/or turbidity in the field with either an appropriate meter or combination of pH paper and turbidity meter. The pH can be measured by inserting a strip of pH paper (provided by the laboratory) into a disposable cup for 2 to 10 minutes and comparing the strip to the color chart. Record the result in the field notebook. If the permittee does not have appropriate field meters, the laboratory is able to analyze all necessary sampling parameters.

After filling the sample bottles with stormwater from the sample location, put the bottles into individual zip-loc bags and into the cooler supplied by the laboratory. Ice should be added to the cooler to begin the preservation process. If samples are brought directly to the laboratory, it is ok that the sample temperatures have not yet reached 4 degrees Celsius. All sample bottles are required to be labeled with the sample ID, date, time, collected by, parameter, preservative and any required notes for the laboratory to consider. Sample ID's include the 4-digit Discharge Point name and the 6-digit date in the following format (DP##-MMDDYY).

4.2 RECORDKEEPING

Records required to be retained include the information recorded in the field during stormwater monitoring and the laboratory reports provided by the laboratory. All of the information to be recorded in the field is summarized on the Quarterly Discharge Monitoring Report and Monthly Inspection form located in Appendix D. These forms, along with the laboratory data, should be kept in the recordkeeping section of this SWPPP (Appendix D). Older copies of Discharge Monitoring Reports (DMRs), explained in Section 4.1.1, and Annual Reports should be kept in Appendix D. Starting in 2015, all DMRs and Annual Reports are submitted online through the Secure Access Washington website, and those records are retained online. Field forms and laboratory reports must be retained for at least 5 years, according to the Permit. Blank forms for quarterly stormwater sampling and monthly inspections are provided in Appendix C.

4.3 SUBMITTAL OF SAMPLES TO THE LABORATORY

Stormwater samples should be submitted to an accredited laboratory. Alaskan Copper currently uses Analytical Resources, Inc., which is located at:

Analytical Resources, Inc.
4611 South 134th Pl

The sample bottles must be labeled and the chain-of-custody (COC) form must be completed. The stormwater sample bottles should be packed in the cooler on ice if not brought directly to the laboratory. If the cooler will leave the sampler's possession before arriving at the laboratory, place the completed COC form inside a Zip-loc bag and inside the cooler, then seal the cooler and bring the cooler to the laboratory. If the turbidity is not measured with a field meter, the sample must be brought to the laboratory as soon as possible because the sample's turbidity level needs to be analyzed by the laboratory within 48 hours of sample collection.

4.4 EVALUATION OF SAMPLING RESULTS

The stormwater sampling results must be submitted to Ecology on a quarterly basis (see Section 4.1); the stormwater sampling results must also be compared to the benchmark values shown in Section 4.1.2 to assess the effectiveness of the current BMPs in preventing pollutants from entering stormwater. Values at or below benchmark values are considered unlikely to cause a water quality violation and consistent attainment of benchmark values over eight consecutive quarters suspends the need to conduct further stormwater sampling for a particular parameter for three years (unless significant process changes take place at the Facility). Therefore, no additional action is needed if sampling results are below benchmark values, with the exception that monthly inspections must continue and DMRs still need to be submitted indicating that consistent attainment has been achieved.

Unlike exceedances of effluent limits, exceedance of benchmark values does not constitute a violation of the Permit because benchmark values are not water quality standards and are not Permit limits. However, it is an indicator that additional measures should be taken to reduce the entry of pollutants into stormwater at the Facility. These response measures range from implementing additional operational BMPs (Level One Corrective Action) to implementing stormwater treatment BMPs (Level Three Corrective Action). These Permit-required corrective actions and the criteria that trigger them are presented below.

Level One Corrective Actions – Operational Source Control BMPs

| |
|---|
| Permittees that exceed any applicable benchmark value(s) shall complete a Level 1 Corrective Action for each parameter exceeded in accordance with the following: |
| <ol style="list-style-type: none">1. Within 14 days of receipt of sampling results that indicate a benchmark exceedance for a given quarter 7; or, for parameters other than pH or visible oil sheen, the end of the quarter, whichever is later:<ol style="list-style-type: none">a. Conduct an inspection to investigate the cause.b. Review the SWPPP and ensure that it fully complies with Permit Condition S3, and contains the correct BMPs from the applicable <i>Stormwater Management Manual</i>.c. Make appropriate revisions to the SWPPP to include additional Operational Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.2. Summarize the Level 1 Corrective Actions in the Annual Report (Condition S9.B). |

3. Level One Deadline: The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable Stormwater Management Manual as soon as possible, but no later than the DMR due date for the quarter the benchmark was exceeded.

Level Two Corrective Actions – Structural Source Control BMPs

Permittees that exceed an applicable *benchmark* value (for a single parameter) for any two quarters during a calendar year shall complete a Level 2 Corrective Action in accordance with S8.C. Alternatively, the permittee may skip Level 2 and complete a Level 3 Corrective Action in accordance with Condition S8.D.

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3.

2. Make appropriate revisions to the SWPPP to include additional Structural Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.

3. Summarize the Level 2 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B).

4. Level 2 Deadline: The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than August 31st the following year.*

- a. If installation of necessary Structural Source Control BMPs is not feasible by August 31st the following year, Ecology may approve additional time, by approving a Modification of Permit Coverage.
- b. If installation of Structural Source Control BMPs is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, Ecology may waive the requirement for additional Structural Source Control BMPs by approving a Modification of Permit Coverage.
- c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to Ecology in accordance with Condition S2.B, by May 15th prior to the Level 2 Deadline. Ecology will approve or deny the request within 60 days of receipt of a complete Modification of Coverage request.
- d. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.
- e. For the year following the calendar year the permittee triggered a Level 2 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

Level Three Corrective Actions – Treatment BMPs

Permittees that exceed an applicable benchmark value (for a single parameter) for any three quarters during a calendar year shall complete a Level 3 Corrective Action in accordance with S8.D. A Level 2 Corrective Action is not required.

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3.

2. Make appropriate revisions to the SWPPP to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. Revisions shall include additional operational and/or structural source control BMPs if necessary for proper performance and maintenance of Treatment BMPs.

A Qualified Industrial Stormwater Professional shall review the revised SWPPP, sign the SWPPP Certification Form, and certify that it is reasonably expected to meet the ISGP benchmarks upon implementation. Upon written request Ecology may, one time during the permit cycle, waive this requirement on a case-by-case basis if a Permittee demonstrates to Ecology's satisfaction that the proposed Level 3 treatment BMPs are reasonably expected to meet ISGP benchmarks upon implementation.

3. Before installing treatment BMPs that require the site-specific design or sizing of structures, equipment, or processes to collect, convey, treat, reclaim, or dispose of industrial stormwater; the Permittee shall submit an engineering report to Ecology for review.

- a. The engineering report must include:
 - i. Brief summary of the treatment alternatives considered and why the proposed option was selected. Include cost estimates of ongoing operation and maintenance, including disposal of any spent media;
 - ii. The basic design data, including characterization of stormwater influent, and sizing calculations of the treatment units;
 - iii. A description of the treatment process and operation, including a flow diagram;
 - iv. The amount and kind of chemicals used in the treatment process, if any. Note: Use of stormwater treatment chemicals requires submittal of Request for Chemical Treatment Form;
 - v. Results to be expected from the treatment process including the predicted stormwater discharge characteristics;
 - vi. A statement, expressing sound engineering justification through the use of pilot plant data, results from similar installations, and/or scientific evidence that the proposed treatment is reasonably expected to meet the permit benchmarks; and
 - vii. Certification by a licensed professional engineer.
- b. The engineering report shall be submitted no later than the May 15th prior to the Level 3 deadline, unless an alternate due date is specified in an order.

| |
|--|
| c. An Operation and Maintenance Manual (O&M Manual) shall be submitted to Ecology no later than 30 days after construction/installation is complete; unless an alternate due date is specified in an order.. |
| 4. Summarize the Level 3 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B). Include information on how monitoring, assessment or evaluation information was (or will be) used to determine whether existing treatment BMPs will be modified/enhanced, or if new/additional treatment BMPs will be installed. |
| 5. Level 3 Deadline: The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable Stormwater Management Manual as soon as possible, but no later than September 30 th the following year. <ul style="list-style-type: none"> a. If installation of necessary Treatment BMPs is not feasible by the Level 3 Deadline, Ecology may approve additional time by approving a Modification of Permit Coverage. b. If installation of Treatment BMPs is not feasible or not necessary to prevent discharges that may cause or contribute to violation of a water quality standard, Ecology may waive the requirement for Treatment BMPs by approving a Modification of Permit Coverage. c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to Ecology in accordance with Condition S2.B, by May 15th prior to the Level 3 Deadline. Ecology will approve or deny the request within 60 days of receipt of a complete Modification of Coverage request. d. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions. e. For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions. |

Facilities that continue to exceed benchmarks after a Level 2 (or Level 3) Corrective Action is triggered, but prior to the Level 2 (or Level 3) Deadline, are not required to complete another Level 2 or 3 Corrective Action the following year for the same parameter. However, a Level 1 Corrective Action is required each time a benchmark is exceeded.

Finally, the results of all visual inspection data should be used to determine if action is needed to respond to the observation of visible pollutants. Response actions may include cleanup of the observed condition and/or investigation of the source of the condition. These response actions must be documented in the monthly inspection form.

The laboratory results from the Appendix D stormwater sampling data are maintained in a separate spreadsheet database for comparison to benchmarks. The data are reviewed to track BMP effectiveness, whether benchmark concentrations are exceeded, and whether the required corrective actions in the Permit are triggered.

4.5 SUBMITTING THE SAMPLING RESULTS TO ECOLOGY

Monitoring results must be submitted quarterly to Ecology electronically using Ecology's Water Quality Permitting Portal – DMR application (also called WebDMR). DMRs may be submitted any time after completing the required monitoring each quarter but must be filed electronically with Ecology as follows:

- First Quarter: Not later than May 15
- Second Quarter: Not later than August 15
- Third Quarter: Not later than November 15
- Fourth Quarter: Not later than February 15

DMR forms must be submitted quarterly whether or not the facility was discharging stormwater. If there was no discharge during a given monitoring period, the DMR must still be submitted by marking the "no discharge" check box, along with an explanation. If sampling has been suspended for a parameter due to consistent attainment, note on the DMR submittal that Consistent Attainment has been achieved for that parameter(s).

In addition, a complete and accurate Annual Report is to be submitted to the Department of Ecology no later than May 15th of each year using Ecology's Water Quality Permitting Portal – Permit Submittals application. The annual report shall include corrective action documentation as required in S8.B-D. If corrective action is not yet completed at the time of submission of the annual report, the Permittee must describe the status of any outstanding corrective action(s). Permittees shall retain a copy of all annual reports on site for Ecology review and shall include the following information with each annual report:

- Identify the condition triggering the need for corrective action review.
- Describe the problem(s) and identify the dates they were discovered.
- Summarize any Level 1, 2, or 3 corrective actions completed during the previous calendar year and include the dates it completed the corrective actions.
- Describe the status of any Level 2 or 3 corrective actions triggered during the previous calendar year, and identify the date it expects to complete corrective actions.

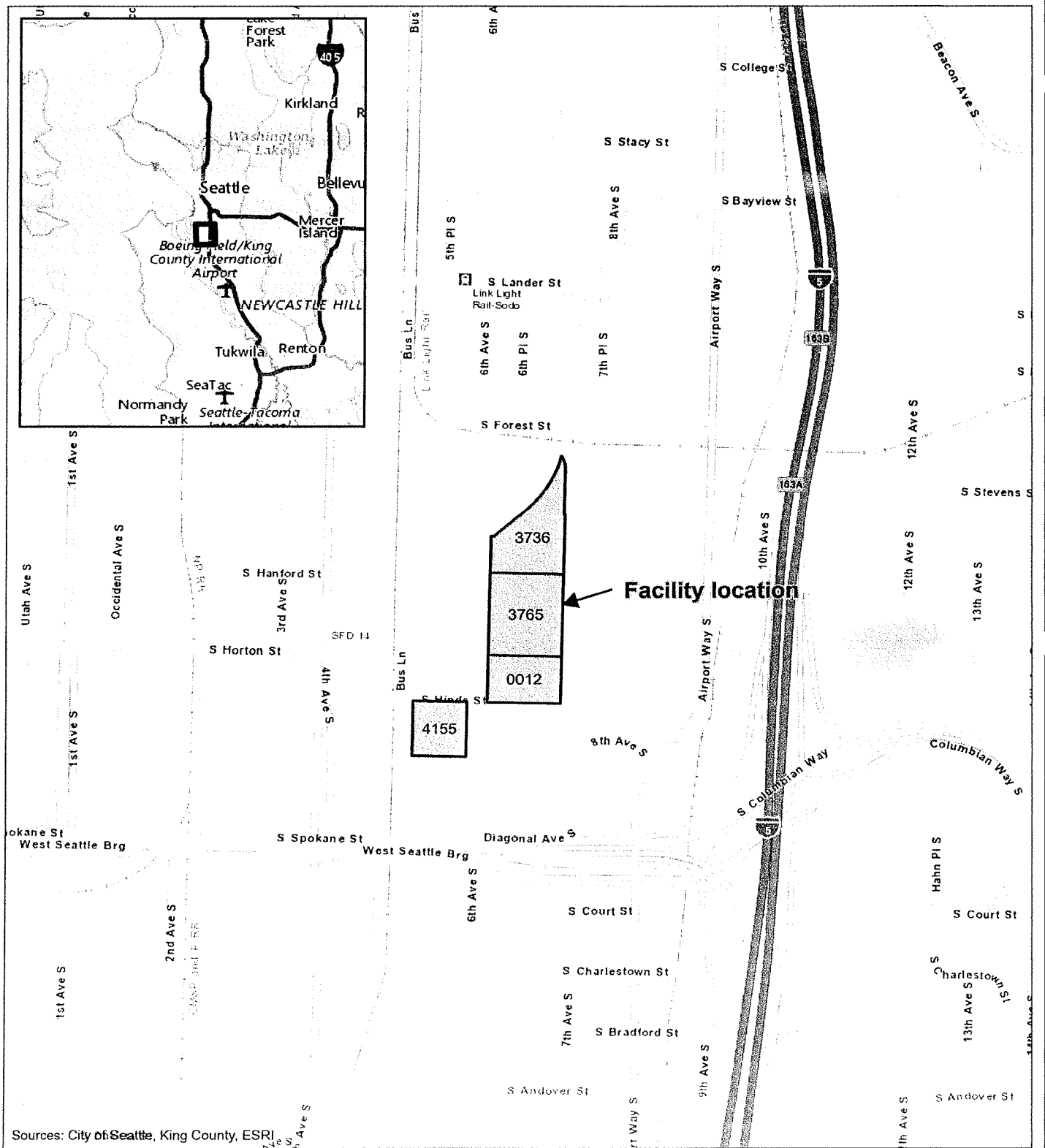
For questions about the Industrial Stormwater General Permit or DMR submittals, Clay Keown at Ecology is an available contact person (360-407-6048 or ckeo461@ecy.wa.gov).

APPENDIX A. SITE MAPS

Figure 1: Vicinity Map

Figure 2: Site Map

Figure 3: Facility Operations and Potential Stormwater Contaminate Sources

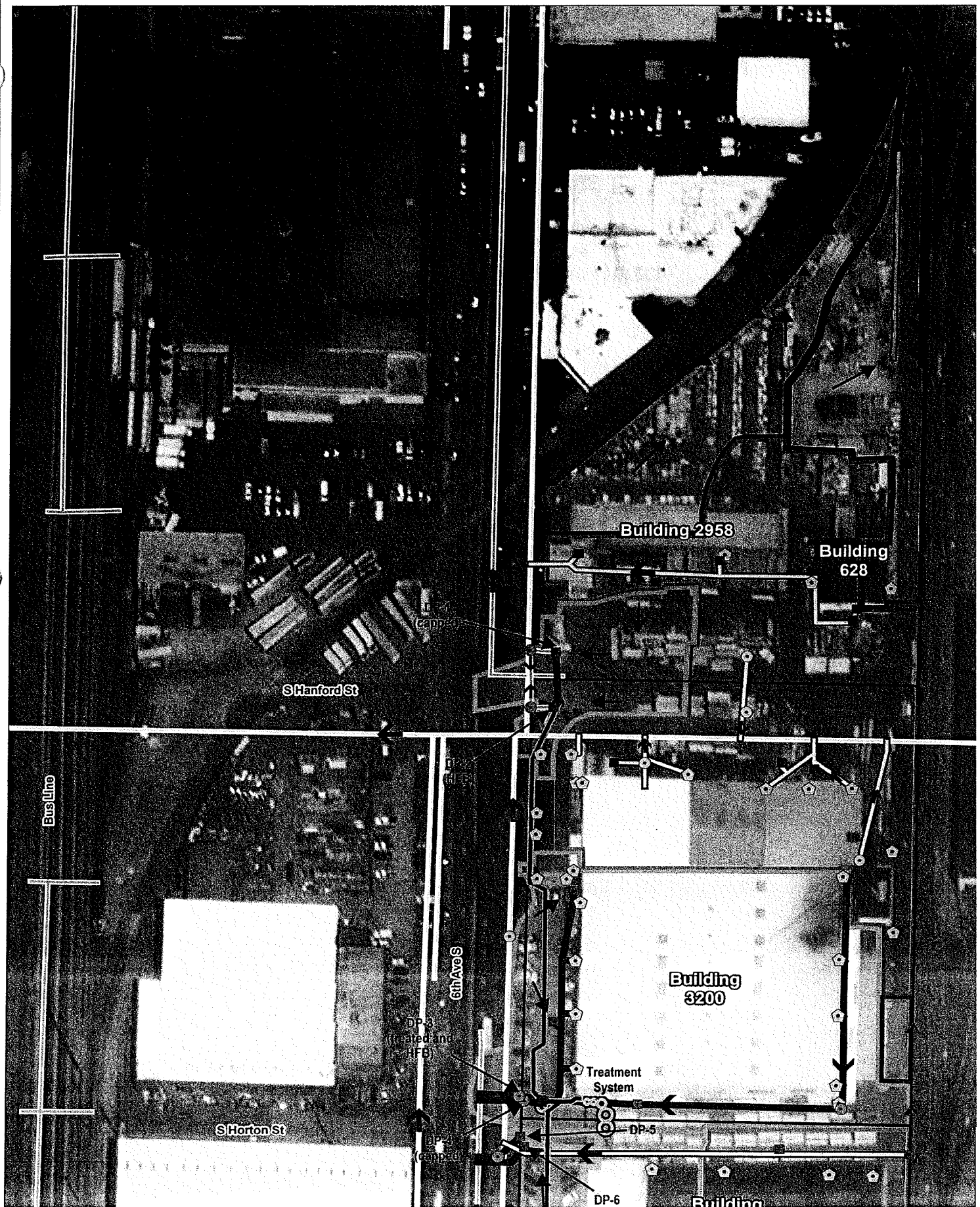


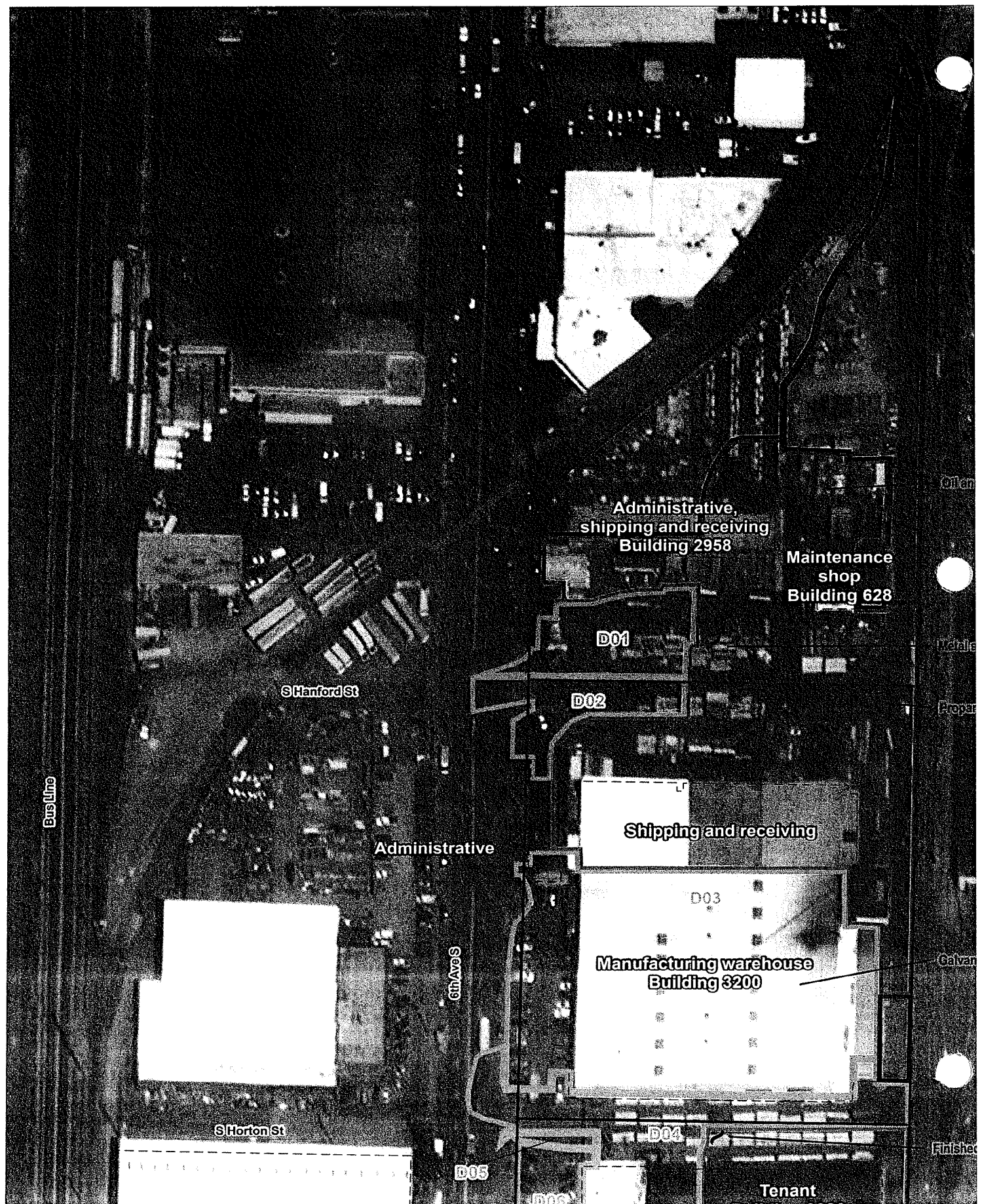
Catchment
Solutions LLC



0 100 200 Feet
0 20 40 Meters

Figure 1. Vicinity map
Alaskan Copper Works Seattle Facility





APPENDIX B. ECOLOGY PERMIT COVERAGE LETTER AND INDUSTRIAL STORMWATER GENERAL PERMIT



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

December 3, 2014

James Brown
Manager Of Environmental Services
Alaskan Copper Works
PO Box 3546
Seattle, WA 98124-3546

Facility Name: ALASKAN COPPER
WORKS
Location: 3200 6TH AVE S
Seattle, WA 98134
Permit No: WAR000139
County: King

RE: Reissuance of Coverage under the Industrial Stormwater General Permit

Dear James Brown:

The Washington Department of Ecology (Ecology) has reissued the Industrial Stormwater General Permit (permit). A copy of your new permit is enclosed. **Retain this letter with your permit and Stormwater Pollution Prevention Plan. It is the official record of permit coverage for your facility.** Ecology issued the final permit December 3, 2014 and it becomes effective January 2, 2015.

Permit Overview

The new permit has a number of changes. The most significant changes are summarized in the enclosed "Summary of Changes" table. You can find more information on Ecology's website at: <http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html>. Please contact Ecology if you have any questions.

New Reporting Requirements

Beginning in 2015, you must submit Discharge Monitoring Reports and Annual Reports electronically, using Ecology's Water Quality Permitting Portal— Permit Submittals application, unless a waiver from electronic reporting has been granted. You can find more information regarding Ecology's Water Quality Permitting Portal on our website at: <http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html>.

If you have technical questions regarding Ecology's Water Quality Permitting Portal, please contact the portal staff at (800) 633-6193/option 3 or email WQWebPortal@ecy.wa.gov.

Site Specific Monitoring Requirements

Enclosed is a summary of the monitoring requirements for your facility. This summary is based on the best information available to Ecology about your facility. If you believe there is a discrepancy between what the permit requires and the enclosed summary, please contact Ecology immediately. In the case of a difference between the permit as applied to your facility and the summary, the permit requirements take precedence.

Your Right to Appeal the Permit

You have a right to appeal the terms and conditions of this general permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this permit issuance notice. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of this notice:

- File your appeal and a copy of this notice with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this notice on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

Address and Location Information

| Street Addresses | Mailing Addresses |
|--|---|
| Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 | Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 |
| Pollution Control Hearings Board 1111 Israel Road SW, Suite 301 Tumwater, WA 98501 | Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903 |

For Additional Information or Assistance

Ecology is committed to providing assistance to you. Please review our web page at <http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html>. For questions about transfers, terminations, and other administrative issues, please contact Josh Klimek at jokl461@ecy.wa.gov or (360) 407-7451.

If you have questions regarding stormwater management issues at your site, please contact Greg Stegman at GSTe461@ecy.wa.gov or (425) 649-7019.

Questions

If you have questions regarding the permit, please contact Jeff Killelea at jeff.killelea@ecy.wa.gov or (360) 407-6127.

Sincerely,



Bill Moore, P.E., Manager
Program Development Services Section
Water Quality Program

Enclosures

Permit No: WAR000139
Facility Name: ALASKAN COPPER WORKS
Location: 3200 6TH AVE S
 Seattle, WA 98134
SIC Codes: 3443, 3498

Summary of Your Facility's ISGP Monitoring Requirements

This summary is based on the best information available to Ecology about your facility. If you believe there is a discrepancy between what the permit requires and the enclosed summary, please contact Ecology immediately. In the case of a difference between the permit as applied to your facility and the summary, the permit requirements take precedence.

Benchmarks and Sampling Requirements Applicable to All Facilities (Condition S5, Table 2)

| Parameter | Units | Benchmark Value | Analytical Method | Laboratory Quantitation Level ¹ |
|---------------|--------|----------------------------------|--------------------------|--|
| Turbidity | NTU | 25 | EPA 180.1 Meter | 0.5 |
| pH | SU | Between 5.0 - 9.0 | Meter/Paper ² | ±0.5 |
| Oil Sheen | Yes/No | No visible oil sheen | N/A | N/A |
| Copper, Total | µg/L | Western WA: 14 Eastern WA: 32 | EPA 200.8 | 2.0 |
| Zinc, Total | µg/L | 117 | EPA 200.8 | 2.5 |

¹The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the discharge monitoring report.

²Permittees shall use either a calibrated pH meter or narrow-range pH indicator paper with a resolution not greater than ± 0.5 Standard Units.

Industry-Specific Benchmarks and Sampling Requirements (Condition S5, Table 3)

| Parameter | Units | Benchmark Value | Analytical Method | Laboratory Quantitation Level ¹ |
|------------------------|-------|-----------------|-------------------|--|
| Lead, Total | µg/L | 81.6 | EPA 200.8 | 0.5 |
| Petroleum Hydrocarbons | mg/L | 10 | ECY NWTPH Dx | 0.1 |

¹The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the discharge monitoring report.

Sampling and Effluent Limits Applicable to Discharges to 303(d)-listed Waters (Condition S6, Table 6)

| Parameter | Units | Maximum Daily ¹ | Analytical Method ² | Laboratory Quantitation Level ³ | Impairment Type |
|--|-------|----------------------------|--------------------------------|--|-------------------------------------|
| Total Suspended Solids (TSS) | mg/L | 30 | SM 2540 D | 5 | 303(d)/Puget Sound Sediment Cleanup |
| ¹ Maximum daily effluent limit means the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. The daily discharge is the average measurement of the pollutant over the day; this does not apply to pH. ² Or other equivalent method with the same reporting level. ³ The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the discharge monitoring report. | | | | | |

Additional Sampling

Ecology may have established site-specific sampling requirements in addition to those contained in the ISGP (Administrative Order, permit modification, etc.). These additional requirements are not addressed in this summary.

Issuance Date: December 3, 2014
Effective Date: January 2, 2015
Expiration Date: December 31, 2019

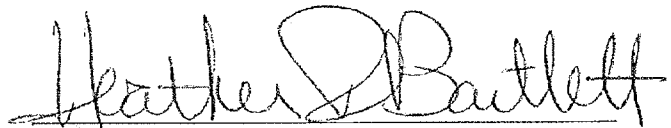
INDUSTRIAL STORMWATER GENERAL PERMIT

A National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge
General Permit for Stormwater Discharges Associated with
Industrial Activities

State of Washington
Department of Ecology
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified or revoked, Permittees that have properly obtained
coverage under this general permit are authorized to discharge in accordance with the special and
general conditions which follow.



Heather R. Bartlett
Water Quality Program Manager
Washington State Department of Ecology

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TABLE OF CONTENTS

| | |
|---|----|
| SUMMARY OF PERMIT REPORTS & SUBMITTALS | 1 |
| SUMMARY OF REQUIRED ONSITE DOCUMENTATION | 1 |
| SPECIAL CONDITIONS | 3 |
| S1. PERMIT COVERAGE | 3 |
| A. Facilities Required to Seek Coverage under This General Permit | 3 |
| B. Significant Contributors of Pollutants | 5 |
| C. Facilities Not Required to Obtain Coverage | 5 |
| D. Facilities Excluded from Coverage..... | 6 |
| E. Discharges to Ground | 7 |
| F. Conditional "No Exposure" Exemption..... | 8 |
| S2. APPLICATION FOR COVERAGE..... | 8 |
| A. Obtaining Permit Coverage..... | 8 |
| B. Modification of Permit Coverage | 8 |
| C. Permit Coverage Timeline | 9 |
| D. Transfer of Permit Coverage..... | 10 |
| S3. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) | 10 |
| A. General Requirements..... | 10 |
| B. Specific SWPPP Requirements..... | 11 |
| S4. GENERAL SAMPLING REQUIREMENTS..... | 19 |
| A. General Requirements..... | 19 |
| B. Sampling Requirements | 19 |
| C. Analytical Procedures for Sampling Requirements | 21 |
| D. Laboratory Accreditation | 22 |
| S5. BENCHMARKS, EFFLUENT LIMITATIONS, AND SPECIFIC SAMPLING REQUIREMENTS..... | 22 |
| A. Benchmarks and Sampling Requirements | 22 |
| B. Additional Sampling Requirements for Specific Industrial Groups | 23 |
| C. Landfills and Airports Subject to Effluent Limitation Guidelines..... | 25 |
| D. Conditionally Authorized Non-Stormwater Discharges | 27 |
| E. Prohibited Discharges | 28 |
| F. General Prohibitions | 28 |
| S6. DISCHARGES TO IMPAIRED WATERS | 28 |
| A. General Requirements for Discharges to Impaired Waters | 28 |
| B. Eligibility for Coverage of New Discharges to Impaired Waters..... | 29 |
| C. Additional Sampling Requirements and Effluent Limits for Discharges to Certain Impaired Waters and Puget Sound Sediment Cleanup Sites | 29 |
| D. Requirements for Discharges to Waters with Applicable TMDLs..... | 34 |

| | | |
|------|---|----|
| S7. | INSPECTIONS | 35 |
| | A. Inspection Frequency and Personnel | 35 |
| | B. Inspection Components..... | 35 |
| | C. Inspection Results | 35 |
| | D. Reports of Non-Compliance | 36 |
| S8. | CORRECTIVE ACTIONS | 36 |
| | A. Implementation of Source Control and Treatment BMPs from Previous Permit | 36 |
| | B. Level One Corrective Actions – Operational Source Control BMPs | 36 |
| | C. Level Two Corrective Actions – Structural Source Control BMPs..... | 37 |
| | D. Level Three Corrective Actions – Treatment BMPs | 37 |
| S9. | REPORTING AND RECORDKEEPING | 39 |
| | A. Discharge Monitoring Reports..... | 39 |
| | B. Annual Reports | 40 |
| | C. Records Retention..... | 41 |
| | D. Additional Sampling by the Permittee..... | 41 |
| | E. Reporting Permit Violations | 42 |
| | F. Public Access to SWPPP | 43 |
| S10. | COMPLIANCE WITH STANDARDS | 43 |
| S11. | PERMIT FEES..... | 44 |
| S12. | SOLID AND LIQUID WASTE MANAGEMENT..... | 44 |
| S13. | NOTICE OF TERMINATION (NOT) | 44 |
| | A. Conditions for a NOT | 44 |
| | B. Procedure for Obtaining Termination..... | 44 |
| | GENERAL CONDITIONS | 45 |
| G1. | DISCHARGE VIOLATIONS | 45 |
| G2. | SIGNATORY REQUIREMENTS..... | 45 |
| G3. | RIGHT OF INSPECTION AND ENTRY | 46 |
| G4. | GENERAL PERMIT MODIFICATION AND REVOCATION | 46 |
| G5. | REVOCATION OF COVERAGE UNDER THE PERMIT | 46 |
| G6. | REPORTING A CAUSE FOR MODIFICATION | 47 |
| G7. | COMPLIANCE WITH OTHER LAWS AND STATUTES..... | 47 |
| G8. | DUTY TO REAPPLY | 47 |

| | | |
|------|--|----|
| G9. | REMOVED SUBSTANCES | 47 |
| G10. | DUTY TO PROVIDE INFORMATION..... | 47 |
| G11. | OTHER REQUIREMENTS OF 40 CFR..... | 48 |
| G12. | ADDITIONAL SAMPLING | 48 |
| G13. | PENALTIES FOR VIOLATING PERMIT CONDITIONS | 48 |
| G14. | UPSET | 48 |
| G15. | PROPERTY RIGHTS..... | 49 |
| G16. | DUTY TO COMPLY | 49 |
| G17. | TOXIC POLLUTANTS..... | 49 |
| G18. | PENALTIES FOR TAMPERING | 49 |
| G19. | REPORTING PLANNED CHANGES | 49 |
| G20. | REPORTING OTHER INFORMATION..... | 50 |
| G21. | REPORTING ANTICIPATED NON-COMPLIANCE..... | 50 |
| G22. | REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT | 50 |
| G23. | APPEALS | 50 |
| G24. | SEVERABILITY | 51 |
| G25. | BYPASS PROHIBITED..... | 51 |
| | APPENDIX 1 - ACRONYMS..... | 53 |
| | APPENDIX 2 - DEFINITIONS..... | 54 |
| | APPENDIX 3 - SWPPP CERTIFICATION FORM | 63 |
| | APPENDIX 4 - EXISTING DISCHARGERS TO IMPAIRED WATERS | 64 |
| | APPENDIX 5 - DISCHARGERS SUBJECT TO TMDL REQUIREMENTS | 64 |

SUMMARY OF PERMIT REPORTS & SUBMITTALS

| Permit Section | Submittal | Frequency | Due Date(s) |
|----------------|--|----------------------------|---|
| S1.F | Conditional "No Exposure" Certification Form | As necessary | As necessary, with renewals every 5 years |
| S2.B | <i>Application</i> for Permit Coverage | As necessary | As necessary |
| S2.B. | Request Modification of Permit Coverage | As necessary | As necessary |
| S2.D | Request Transfer of Coverage | As necessary | As necessary |
| S8.D | Level 3 Engineering Report | As necessary | May 15 th , prior to Level 3 deadline ¹ |
| S8.D | Level 3 O&M Manual | As necessary | 30 days after Level 3 installation |
| S9.A | Discharge Monitoring Reports (DMRs) | 1/quarter | February 15 th , May 15 th , August 15 th , November 15 th |
| S9.B | Annual Report | 1/year | May 15 th |
| S9.C. | SWPPP, if requested by <i>Ecology</i> | Per <i>Ecology</i> request | Within 14 days of request |
| S9.E | Noncompliance Notification | As necessary | Within 30 days of noncompliance event |
| G8 | Duty to Reapply | 1/permit cycle | July 3, 2019 |

SUMMARY OF REQUIRED ONSITE DOCUMENTATION²

| Permit Condition(s) | Document Title |
|---------------------|--|
| S3.A.4.a | <i>Stormwater Pollution Prevention Plan (SWPPP)</i> ³ |
| S9.B | Copies of Annual Reports |
| S9.C.1.a | Copy of Permit |
| S9.C.1.b | Copy of Permit Coverage Letter |
| S9.C.1.c | Original Sampling Records (Field Notes and Laboratory Reports) |
| S7.C & S9.C.1.d | Site Inspection Reports |
| S9.C.1.j | Copies of Discharge Monitoring Reports (DMRs) |

¹ Unless an alternate due date is specified in an order.

² A complete list is contained in Condition S9.C. The Permittee shall make all plans, documents and records required

by this permit immediately available to Ecology or the local jurisdiction upon request.

³ With signed and completed SWPPP Certification Form(s) – see Appendix 3.

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SPECIAL CONDITIONS

S1. PERMIT COVERAGE

A. Facilities Required to Seek Coverage under This General Permit

This statewide permit applies to *facilities* conducting *industrial activities* that *discharge stormwater* to a surface waterbody or to a *storm sewer* system that drains to a surface waterbody. Beginning on the effective date of this permit and lasting through its expiration date, the Permittee is authorized to *discharge stormwater* and conditionally approved non-stormwater *discharges* to *waters of the state*. All *discharges* and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

The permit requires coverage for private entities, state, and *local government* facilities, and includes *existing facilities* and *new facilities*. Facilities conducting industrial activities listed in Table 1 or referenced in S1.A.3 shall apply for coverage under this permit or apply for a Conditional No Exposure exemption, if eligible (Condition S1.F). The *Department of Ecology (Ecology)* may also require permit coverage for any *facility* on a case-by-case basis in order to protect *waters of the state* (Condition S1.B).

1. Facilities engaged in any industrial activities in Table 1 shall apply for coverage if *stormwater* from the *facility discharges* to a surface waterbody, or to a *storm sewer* system that *discharges* to a surface waterbody. The *Standard Industrial Classification (SIC)* groups generally, but not always, associated with these activities are listed in Table 1.

Table 1: Activities Requiring Permit Coverage and the Associated SIC Groups

| Industrial Activities | SIC Groups |
|---|------------|
| Metal Mining | 10xx |
| Coal Mining | 12xx |
| Oil and Gas Extraction | 13xx |
| Mining and Quarrying of Nonmetallic Minerals, except Fuels (except facilities in SIC Codes 1411, 1422, 1423, 1429, 1442, 1446, 1445, 1459, and 1499; these facilities are covered under the Sand and Gravel General Permit) | 14xx |
| Food and Kindred Products | 20xx |
| Tobacco Products | 21xx |
| Textile Mill Products | 22xx |
| Apparel and Other Finished Products Made from Fabrics and Similar Material | 23xx |
| Lumber and Wood Products | 24xx |
| Furniture and Fixtures | 25xx |
| Paper and Allied Products | 26xx |
| Printing, Publishing and Allied Industries | 27xx |
| Chemicals and Allied Products (including Compost Facilities) | 28xx |
| Petroleum Refining and Related Industries (Except facilities in SIC 2951; these facilities are covered under the Sand and Gravel General Permit) | 29xx |
| Rubber and Miscellaneous Products | 30xx |
| Leather and Leather Products | 31xx |

| Industrial Activities | SIC Groups |
|---|-------------------|
| Stone, Clay, Glass, and Concrete Products (Except facilities in SIC 3271-3273; these facilities are covered under the Sand and Gravel General Permit) | 32xx |
| Primary Metal Industries | 33xx |
| Fabricated Metal Products | 34xx |
| Industrial and Commercial Machinery and Computer Equipment | 35xx |
| Electronic and Other Electrical Equipment and Components | 36xx |
| Transportation Equipment | 37xx |
| Measuring, Analyzing, and Controlling Instruments; Photographic, Medical, and Optical Goods; Watches and Clocks | 38xx |
| Miscellaneous Manufacturing Industries | 39xx |
| Farm Product Storage | 4221 |
| Refrigerated Storage | 4222 |
| General Storage | 4225 |
| Recycling facilities involved in the recycling of materials, including but not limited to, metal scrap yards, battery reclaimers, salvage yards, auto recyclers, and automobile junkyards. | 5015 and 5093 |
| Steam Electric Power Generation | N/A |
| Refuse Systems, including, but not limited to, <i>landfills</i> , transfer stations, open dumps, and <i>land application sites</i> , except as described in S1.C.6 or C.7. | 4953 |
| Hazardous waste treatment, storage, and disposal (TSD) facilities, and recycling facilities regulated under Chapter 173-303 WAC. | N/A |
| Treatment works treating domestic sewage, or any other sewage sludge, or wastewater treatment device or system, used in the storage, recycling, and reclamation of municipal or domestic sewage (including land dedicated to the disposal of sewage sludge that are located within the confines of the <i>facility</i>) with the design flow capacity of 1 million gallons per day (MGD) or more, or required to have a pretreatment program under <i>40 CFR</i> §403. | 4952 |
| Transportation facilities which have <i>vehicle maintenance</i> activity, equipment cleaning operations, or airport <i>deicing</i> operations: | |
| • Railroad Transportation | 40xx |
| • Local and Suburban Transit and Interurban Highway Passenger Transportation | 41xx |
| • Motor Freight Transportation (except SIC 4221–25) | 42xx |
| • United States Postal Service | 43xx |
| • Water Transportation | 44xx |
| • Air Transportation | 45xx |
| • Petroleum Bulk Stations and Terminals | 5171 |

2. Any facility that has an existing *National Pollutant Discharge Elimination System (NPDES)* permit which does not address all *stormwater discharges associated with industrial activity* [40 CFR Subpart 122.26(b)(14)] shall obtain permit coverage.
3. Any *inactive facility* which is listed under 40 CFR Subpart 122.26(b)(14) where *significant materials* remain onsite and are exposed to *stormwater* shall obtain permit coverage.

B. Significant Contributors of Pollutants

Ecology may require a facility to obtain coverage under this permit if *Ecology* determines the facility:

1. Is a *significant contributor of pollutants to waters of the state*, including *ground water*;
2. May reasonably be expected to cause a violation of any *water quality standard*; or
3. Conducts *industrial activity*, or has a SIC code, with *stormwater* characteristics similar to any *industrial activity* or SIC code listed in Table 1 in S1.A.1.

C. Facilities Not Required to Obtain Coverage

Ecology does not require the types of facilities listed below to obtain coverage under this permit, unless determined to be a *significant contributor of pollutants*.

1. Industrial facilities that submit an *application* and qualify for a Conditional “No Exposure” Exemption. (Condition S1.F)
2. Industrial facilities that *discharge stormwater* only to a municipal *combined sewer* or *sanitary sewer*. *Discharge* of stormwater to sanitary or *combined sewers* shall only occur as authorized by the municipal sewage authority.
3. Industrial facilities that *discharge stormwater* only to groundwater (e.g., on-site infiltration) with no *discharge to surface waters of the state* under any condition.
4. Office buildings and/or administrative parking lots from which *stormwater* does not commingle with stormwater from areas associated with *industrial activity*.
5. Any part of a *facility* with a *discharge* that is in compliance with the instructions of an On-Scene-Coordinator pursuant to 40 CFR part 300 (The National Oil and Hazardous Substances Pollution Contingency Plan) or 33 CFR 153.10(e) (Pollution by Oil and Hazardous Substances), in accordance with 40 CFR 122.3(d).
6. Any *land application site* used for the beneficial use of industrial or municipal wastewater for agricultural activities or when applied for landscaping purposes at agronomic rates.
7. Any farmland, domestic garden, or land used for sludge management where domestic sewage sludge (biosolids) is beneficially reused (nutrient builder or soil conditioner) and which is not physically located in the confines of domestic sewage treatment works, or areas that are in compliance with Section 405 (Disposal of Sewage Sludge) of the *Clean Water Act (CWA)*.

8. Any inactive coal mining operation if:
 - a. The performance bond issued to the *facility* by the appropriate Surface Mining Control and Reclamation Act (SMCRA) authority has been released from applicable state or federal reclamation requirements after December 17, 1990.
 - b. The mine does not have a *discharge* of *stormwater* that comes in contact with any overburden, raw material, intermediate products, finished products, byproducts, or waste products located on the site of the *facility*.
9. Inactive mining, inactive oil and gas operations, or inactive *landfills* where neither an owner nor an operator can be identified.
10. Closed *landfills* that are capped and stabilized, in compliance with Chapter 173-304 WAC, and in which no *significant materials* or industrial *pollutants* remain exposed to *stormwater*. Permittee's with existing coverage may submit a *Notice of Termination* in accordance with Special Condition S13.A.1.

D. Facilities Excluded from Coverage

Ecology will not cover the following facilities or activities under this permit:

1. If any part of a *facility*, in the categories listed below, has a *stormwater discharge* subject to *stormwater* Effluent Limitations Guidelines, New Source Performance Standards (NSPS) Under 40 CFR Subchapter N, or Toxic Pollutant Effluent Standards under 40 CFR Subchapter D Part 129; the operator of the facility must apply for an individual NPDES permit or seek coverage under an industry-specific *general permit* for those *stormwater discharges*.

Below is a list of categories of industries specified in 40 CFR Subchapter N for which at least one subpart includes *stormwater* effluent limitations guidelines or NSPS. Industries included in this list should review the Subchapter N guidelines to determine if they are subject to a *stormwater* effluent limitation guideline for activities which they perform at their site.

| | |
|--|--|
| 40 CFR 411 Cement manufacturing | 40 CFR 423 Steam electric power generating |
| 40 CFR 412 Feedlots | 40 CFR 434 Coal mining |
| 40 CFR 418 Fertilizer manufacturing | 40 CFR 436 Mineral mining and processing |
| 40 CFR 419 Petroleum refining | 40 CFR 440 Ore mining and dressing |
| 40 CFR 422 Phosphate manufacturing | 40 CFR 443 Paving and roofing materials (tars & asphalt) |
| 40 CFR 449.11(a) Airports with more than 10,000 annual jet departures. | |

Facilities, which are subject to effluent standards in 40 CFR Subchapter D Part 129: Aldrin/Dieldrin; DDT; Endrin; Toxaphene; Benzdine; or Polychlorinated Biphenyls (PCBs), shall apply for an individual NPDES permit.

2. Nonpoint source silvicultural activities with natural *runoff* that are excluded in 40 CFR Subpart 122.27.

3. Industrial activities operated by any department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government of the United States, or another entity, such as a private contractor, performing industrial activity for any such department, agency, or instrumentality.
4. Facilities located on "Indian Country" as defined in 18 U.S.C. §1151, except portions of the Puyallup Reservation as noted below.

Indian Country includes:

- a. All land within any Indian Reservation notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation. This includes all federal, tribal, and Indian and non-Indian privately owned land within the reservation.
- b. All off-reservation Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.
- c. All off-reservation federal trust lands held for Native American Tribes.

Puyallup Exception: Following the *Puyallup Tribes of Indians Land Settlement Act of 1989*, 25 U.S.C. §1773; the permit does apply to land within the Puyallup Reservation except for discharges to surface water on land held in trust by the federal government.

5. Any facility authorized to *discharge stormwater* associated with *industrial activity* under an existing NPDES individual or other *general permit*.
6. All *construction activities*. Operators of these construction activities shall seek coverage under the Construction Stormwater General Permit or an individual NPDES permit for *stormwater* associated with *construction activity*.
7. Facilities that *discharge* to a waterbody with a *control plan*, unless this *general permit* adequately provides the level of protection required by the *control plan*.
8. *New dischargers* to a waterbody listed pursuant to Section 303(d) of the CWA, unless the Permittee meets the requirements of Condition S6.B.
9. Hazardous waste *landfills* subject to 40 CFR Part 445, Subpart A.

E. Discharges to Ground

1. For sites that *discharge* to both surface water and *ground water*, the terms and conditions of this permit shall apply to all *ground water discharges*. However, Permittees are not required to sample on-site discharges to ground (e.g., infiltration), unless specifically required by *Ecology* (Condition G12).
2. Facilities that *discharge* to *ground water* through an *underground injection control well* shall comply with any applicable requirements of the Underground Injection Control (UIC) regulations, Chapter 173-218 WAC.

F. Conditional "No Exposure" Exemption

1. Any *industrial activity* identified for coverage under Condition S1.A. that is eligible for a "No Exposure" exemption from the permit under 40 CFR 122.26 (g), may submit a No Exposure Certification Form to *Ecology*, either in writing or electronically.
 - a. A Permittee is automatically granted a No Exposure exemption 90 days from *Ecology's* receipt of a complete and accurate No Exposure Certification Form, unless *Ecology* informs the applicant in writing or electronically within 90 days that it has denied or approved the request.
 - b. *Ecology* will automatically terminate permit coverage when it grants the No Exposure exemption to a permitted *facility*.
 - c. Facilities which are granted a No Exposure exemption must submit a No Exposure Certification Form to *Ecology* once every five years.
 - d. No Exposure exemptions are conditional. If there is a change at the *facility* that results in the exposure of industrial activities or materials to *stormwater*, the *facility* is required to immediately apply for and obtain a permit.

S2. APPLICATION FOR COVERAGE

A. Obtaining Permit Coverage

1. Unpermitted facilities that require coverage under this permit shall submit a complete and accurate permit *application* to *Ecology* as follows:
 - a. Existing Facilities
 - i. Unpermitted *existing facilities* that require coverage under this permit shall submit a complete and accurate permit *application* to *Ecology*.
 - ii. *Existing facilities* are facilities in operation prior to the effective date of this permit, January 2, 2015.
 - b. New Facilities

New facilities are facilities that begin operation on or after the effective date of this permit, January 2, 2015. All unpermitted *new facilities* shall:

 - i. Submit a complete and accurate permit *application* to *Ecology* at least 60 days before the commencement of *stormwater discharge* from the *facility*.
 - ii. The *application* shall include certification that the *facility* has met the applicable public notice and *State Environmental Policy Act (SEPA)* requirements in WAC 173-226-200(f).

B. Modification of Permit Coverage

A Permittee anticipating a *significant process change*, or otherwise requesting a modification of permit coverage, shall submit a complete Modification of Coverage Form to *Ecology*. The Permittee shall:

S2.B.1

1. Apply for modification of coverage at least 60 days before implementing a *significant process change*; or by May 15th prior to a Corrective Action deadline, if requesting a Level 2 or 3 time extension or waiver request per Condition S8.B-D.
2. Complete the public notice requirements in WAC 173-226-130(5) as part of a complete *application* for modification of coverage.
3. Comply with SEPA as part of a complete *application* for modification of coverage if undergoing a *significant process change*.

C. Permit Coverage Timeline

1. If the applicant does not receive notification from *Ecology*, permit coverage automatically commences on whichever of the following dates occurs last:
 - a. The 31st day following receipt by *Ecology* of a completed *application* for coverage.
 - b. The 31st day following the end of a 30-day public comment period.
 - c. The effective date of the *general permit*.
2. *Ecology* may need additional time to review the *application*:
 - a. If the *application* is incomplete.
 - b. If it requires additional site-specific information.
 - c. If the public requests a public hearing.
 - d. If members of the public file comments.
 - e. When more information is necessary to determine whether coverage under the *general permit* is appropriate.
3. When *Ecology* needs additional time:
 - a. *Ecology* will notify the applicant in writing within 30 days and identify the issues that the applicant must resolve before a decision can be reached.
 - b. *Ecology* will submit the final decision to the applicant in writing. If *Ecology* approves the *application* for coverage, coverage begins the 31st day following approval, or the date the approval letter is issued, whichever is later.

D. Transfer of Permit Coverage

Coverage under this *general permit* shall automatically transfer to a *new discharger*, if all of the following conditions are met:

1. The Permittee (existing *discharger*) and *new discharger* submit to *Ecology* a complete, written, signed agreement (Transfer of Coverage Form) containing a specific date for transfer of permit responsibility, coverage, and liability.
2. The type of industrial activities and practices remain substantially unchanged.
3. *Ecology* does not notify the Permittee of the need to submit a new *application* for coverage under the *general permit* or for an individual permit pursuant to Chapters 173-216, 173-220, and 173-226 WAC.
4. *Ecology* does not notify the existing *discharger* and *new discharger* of its intent to revoke coverage under the *general permit*. The transfer is effective on the date specified in the written agreement unless *Ecology* gives this notice.

S3. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General Requirements

1. All Permittees and applicants for coverage under this permit shall develop and implement a SWPPP for the permitted *facility* as follows:
2. The SWPPP shall specify the *Best Management Practices* (BMPs) necessary to:
 - a. Provide *all known, available, and reasonable methods of prevention, control, and treatment (AKART)* of *stormwater pollution*.
 - b. Ensure the *discharge* does not cause or contribute to a violation of the *Water Quality Standards*.
 - c. Comply with applicable federal technology-based treatment requirements under *40 CFR 125.3*.
3. Proper Selection and Use of *Stormwater Management Manuals (SWMM)*:

BMPs shall be consistent with:

 - a. *Stormwater Management Manual* for Western Washington (2012 edition), for sites west of the crest of the Cascade Mountains; or
 - b. *Stormwater Management Manual* for Eastern Washington (2004 edition), for sites east of the crest of the Cascade Mountains; or
 - c. Revisions to the manuals in S3.A.3.a & b., or other *stormwater* management guidance documents or manuals which provide an equivalent level of *pollution* prevention, that are approved by *Ecology* and incorporated into this permit in accordance with the permit modification requirements of WAC 173-226-230. For purposes of this section, the documents listed in Appendix 10 of the August 1, 2013 Phase I Municipal Stormwater Permit are hereby incorporated into this permit; or

- d. Documentation in the SWPPP that the BMPs selected are *demonstrably equivalent* to practices contained in stormwater technical manuals approved by *Ecology*, including the proper selection, implementation, and maintenance of all applicable and appropriate *best management practices* for on-site *pollution* control.
4. Update of the SWPPP
- a. The Permittee shall modify the SWPPP if the owner/operator or the applicable local or state regulatory authority determines during inspections or investigations that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing *pollutants* in *stormwater* discharges from the site. The Permittee shall modify the SWPPP:
 - i. As necessary to include additional or modified BMPs designed to correct problems identified.
 - ii. To correct the deficiencies identified in writing from *Ecology* within 30 days of notice.
 - b. The Permittee shall modify the SWPPP whenever there is a change in design, construction, operation, or maintenance at the *facility* that significantly changes the nature of *pollutants* discharged in *stormwater* from the *facility*, or significantly increases the quantity of pollutants discharged.
 - c. If a Permittee covered under the 2010 ISGP needs to update their SWPPP to be consistent with the 2015 ISGP, the update shall be completed by January 30, 2015.

5. Other *Pollution Control Plans*

The Permittee may incorporate by reference applicable portions of plans prepared for other purposes at their *facility*. Plans or portions of plans incorporated by reference into a SWPPP become enforceable requirements of this permit and must be available along with the SWPPP as required in S9.F. A *Pollution Prevention Plan* prepared under the Hazardous Waste Reduction Act, Chapter 70.95C RCW, is an example of such a plan.

6. Signatory Requirements

The Permittee shall sign and certify all SWPPPs in accordance with General Condition G2, each time it revises or modifies a SWPPP to comply with Conditions S3.A.4 (Update of the SWPPP), S7 (Inspections) or S8 (Corrective Actions). The SWPPP Certification Form is contained in Appendix 3 of this permit and on *Ecology's* industrial stormwater website.

B. Specific SWPPP Requirements

The SWPPP shall contain a site map, a detailed assessment of the *facility*, a detailed description of the BMPs, Spill Prevention and Emergency Cleanup Plan, and a sampling plan. The Permittee shall identify any parts of the SWPPP which the *facility* wants to claim as Confidential Business Information.

1. The site map shall identify:
 - a. The scale or include relative distances between significant structures and drainage systems.
 - b. Significant features.
 - c. The *stormwater* drainage and *discharge* structures and identify, by name, any other party other than the Permittee that owns any *stormwater* drainage or discharge structures.
 - d. The *stormwater* drainage areas for each *stormwater discharge* point off-site (including discharges to *ground water*) and assign a unique identifying number for each discharge point.
 - e. Each sampling location by unique identifying number.
 - f. Paved areas and buildings.
 - g. Areas of *pollutant* contact (actual or potential) associated with specific industrial activities.
 - h. Conditionally approved non-*stormwater* discharges (Condition S5.D).
 - i. Surface water locations (including wetlands and drainage ditches).
 - j. Areas of existing and potential soil *erosion* that could result in the discharge of a *significant amount* of turbidity, sediment or other pollutants.
 - k. *Vehicle maintenance* areas.
 - l. Lands and waters adjacent to the site that may be helpful in identifying *discharge* points or drainage routes.
2. The *facility* assessment shall include a description of the *facility*; an inventory of *facility* activities and equipment that contribute to or have the potential to contribute any *pollutants* to *stormwater*; and, an inventory of materials that contribute to or have the potential to contribute pollutants to *stormwater*.
 - a. The *facility* description shall describe:
 - i. The industrial activities conducted at the site.
 - ii. *Regular business hours* and seasonal variations in business hours or industrial activities.
 - iii. The general layout of the *facility* including buildings and storage of raw materials, and the flow of goods and materials through the *facility*.
 - b. The inventory of industrial activities shall identify all areas associated with industrial activities (see Table 1) that have been or may potentially be sources of *pollutants*, including, but not limited to, the following:
 - i. Loading and unloading of dry bulk materials or liquids.
 - ii. Outdoor storage of materials or products.
 - iii. Outdoor manufacturing and processing.

- iv. On-site dust or particulate generating processes.
- v. On-site waste treatment, storage, or disposal.
- vi. *Vehicle* and equipment fueling, maintenance, and/or cleaning (includes washing).
- vii. Roofs or other surfaces exposed to *air emissions* from a manufacturing building or a process area.
- viii. Roofs or other surfaces composed of materials that may be mobilized by *stormwater* (e.g., galvanized roofs, galvanized fences).
- c. The inventory of materials shall list:
 - i. The types of materials handled at the site that potentially may be exposed to precipitation or *runoff* and could result in *stormwater pollution*.
 - ii. A short narrative for each material describing the potential of the *pollutant* to be present in *stormwater* discharges. The Permittee shall update this narrative when data become available to verify the presence or absence of these pollutants.
 - iii. A narrative description of any potential sources of *pollutants* from past activities, materials and spills that were previously handled, treated, stored, or disposed of in a manner to allow ongoing exposure to *stormwater*. Include the method and location of on-site storage or disposal. List significant spills and significant leaks of toxic or hazardous pollutants.
- 3. The SWPPP shall identify specific individuals by name or by title within the organization (*pollution* prevention team) whose responsibilities include: SWPPP development, implementation, maintenance, and modification.
- 4. *Best Management Practices* (BMPs)
 - a. General BMP Requirements

The Permittee shall describe each BMP selected to eliminate or reduce the potential to contaminate *stormwater* and prevent violations of *water quality standards*. The SWPPP must explain in detail how and where the selected BMPs will be implemented.
 - b. The Permittee shall include each of the following mandatory BMPs in the SWPPP and implement the BMPs. The Permittee may omit individual BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP.
 - i. *Operational Source Control BMPs*
 - 1) The SWPPP shall include the *Operational Source Control BMPs* listed as “applicable” in *Ecology’s* SWMMs, or other guidance documents or manuals approved in accordance with S3.A.3.c.

- 2) Good Housekeeping: The SWPPP shall include BMPs that define ongoing maintenance and cleanup, as appropriate, of areas which may contribute *pollutants* to *stormwater* discharges. The SWPPP shall include the schedule/frequency for completing each housekeeping task, based upon *industrial activity*, sampling results and observations made during inspections. The Permittee shall:
 - a) Vacuum paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated *pollutants* a minimum of once per quarter.
 - b) Identify and control all on-site sources of dust to minimize *stormwater* contamination from the deposition of dust on areas exposed to precipitation.
 - c) Inspect and maintain bag houses monthly to prevent the escape of dust from the system. Immediately remove any accumulated dust at the base of exterior bag houses.
 - d) Keep all dumpsters under cover or fit with a lid that must remain closed when not in use.
- 3) Preventive Maintenance: The SWPPP shall include BMPs to inspect and maintain the *stormwater* drainage, source controls, treatment systems (if any), and plant equipment and systems that could fail and result in contamination of *stormwater*. The SWPPP shall include the schedule/frequency for completing each maintenance task. The Permittee must:
 - a) Clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe.
 - b) Maintain ponds, tanks/vaults, catch basins, swales, filters, oil/water separators, drains, and other stormwater drainage/treatment facilities in accordance with the Maintenance Standards set forth in the applicable Stormwater Management Manual (SWMM), other guidance documents or manuals approved in accordance with S3.A.3.c., demonstrably equivalent BMPs per S3.A.3.d., or an O&M Manual submitted to Ecology in accordance with S8.D.
 - c) Inspect all equipment and vehicles during monthly site inspections for leaking fluids such as oil, antifreeze, etc. Take leaking equipment and *vehicles* out of service or prevent leaks from spilling on the ground until repaired.
 - d) Immediately clean up spills and leaks (e.g., using absorbents, vacuuming) to prevent the *discharge* of *pollutants*.

- 4) Spill Prevention and Emergency Cleanup Plan (SPECP): The SWPPP shall include a SPECP that includes BMPs to prevent spills that can contaminate *stormwater*. The SPECP shall specify BMPs for *material handling* procedures, storage requirements, cleanup equipment and procedures, and spill logs, as appropriate. The Permittee shall:
- a) Store all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater.
 - b) Prevent precipitation from accumulating in containment areas with a roof or equivalent structure or include a plan on how it will manage and dispose of accumulated water if a containment area cover is not practical.
 - c) Locate spill kits within 25 feet of all stationary fueling stations, fuel transfer stations, mobile fueling units, and used oil storage/transfer stations. At a minimum, spill kits shall include:
 - i) Oil absorbents capable of absorbing 15 gallons of fuel.
 - ii) A storm drain plug or cover kit.
 - iii) A non-water containment boom, a minimum of 10 feet in length with a 12-gallon absorbent capacity.
 - iv) A non-metallic shovel.
 - v) Two five-gallon buckets with lids.
 - d) Not lock shut-off fueling nozzles in the open position. Do not “top-off” tanks being refueled.
 - e) Block, plug or cover storm drains that receive *runoff* from areas where fueling, during fueling.
 - f) Use drip pans or equivalent containment measures during all petroleum transfer operations.
 - g) Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone *vehicles* and equipment awaiting maintenance to protected areas).
 - h) Use drip pans and absorbents under or around leaky *vehicles* and equipment or store indoors where feasible. Drain fluids from equipment and *vehicles* prior to on-site storage or disposal.
 - i) Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason

for spill; date/time cleanup completed, notifications made and staff involved.

- 5) **Employee Training:** The SWPPP shall include BMPs to provide SWPPP training for employees who have duties in areas of industrial activities subject to this permit. At a minimum, the training plan shall include:
 - a) The content of the training.
 - i) An overview of what is in the SWPPP.
 - ii) How employees make a difference in complying with the SWPPP and preventing contamination of *stormwater*.
 - iii) Spill response procedures, good housekeeping, maintenance requirements, and material management practices.
 - b) How the Permittee will conduct training.
 - c) The frequency/schedule of training. The Permittee shall train employees annually, at a minimum.
 - d) A log of the dates on which specific employees received training.
- 6) **Inspections and Recordkeeping:** The SWPPP shall include documentation of procedures to ensure compliance with permit requirements for inspections and recordkeeping. At a minimum, the SWPPP shall:
 - a) Identify *facility* personnel who will inspect designated equipment and *facility* areas as required in Condition S7.
 - b) Contain a visual inspection report or check list that includes all items required by Condition S7.C.
 - c) Provide a tracking or follow-up procedure to ensure that a report is prepared and any appropriate action taken in response to visual inspections.
 - d) Define how the Permittee will comply with signature requirements and records retention identified in Special Condition S9, Reporting and Recordkeeping Requirements.
 - e) Include a certification of compliance with the SWPPP and permit for each inspection using the language in S7.C.1.c.
 - f) Include all inspection reports completed by the Permittee (S7.C).
- 7) **Illicit Discharges:** The SWPPP shall include measures to identify and eliminate the *discharge of process wastewater, domestic wastewater, noncontact cooling water, and other illicit discharges, to stormwater sewers, or to surface waters and ground waters of the state*. The Permittee can find BMPs to identify and eliminate *illicit discharges* in Volume IV of

Ecology's SWMM for Western Washington and Chapter 8 of the SWMM for Eastern Washington.

Water from washing *vehicles* or equipment, steam cleaning and/or pressure washing is considered *process wastewater*. The Permittee must not allow this process wastewater to comeingle with *stormwater* or enter storm drains; and must collect in a tank for off-site disposal, or *discharge* it to a *sanitary sewer*, with written approval from the local sewage authority.

ii. *Structural Source Control BMPs*

- 1) The SWPPP shall include the *Structural Source Control BMPs* listed as “applicable” in *Ecology's* SWMMs, or other guidance documents or manuals approved in accordance with S3.A.3.c.
- 2) The SWPPP shall include BMPs to minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and *runoff* by either locating these industrial materials and activities inside or protecting them with storm resistant coverings.

Permittees shall:

- a) Use grading, berming, or curbing to prevent *runoff* of contaminated flows and divert run-on away from these areas.
- b) Perform all cleaning operations indoors, under cover, or in bermed areas that prevent *stormwater runoff* and run-on, also that capture any overspray.
- c) Ensure that all washwater drains to a collection system that directs the washwater to further treatment or storage and not to the *stormwater drainage system*.

iii. *Treatment BMPs*

The Permittee shall:

- 1) Use *Treatment BMPs* consistent with the applicable documents referenced in Condition S3.A.3.
- 2) Employ oil/water separators, booms, skimmers, or other methods to eliminate or minimize oil and grease contamination of *stormwater* discharges.
- 3) Obtain *Ecology* approval before beginning construction/installation of all *treatment BMPs* that include the addition of chemicals to provide treatment.

iv. *Stormwater Peak Runoff* Rate and Volume Control BMPs

Facilities with *new development* or *redevelopment* shall evaluate whether flow control BMPs are necessary to satisfy the state's AKART requirements, and prevent violations of water quality standards. If flow control BMPs are required, they shall be selected according to S3.A.3.

v. *Erosion and Sediment Control* BMPs

The SWPPP shall include BMPs necessary to prevent the *erosion* of soils and other earthen materials (crushed rock/gravel, etc.), control off-site *sedimentation*, and prevent violations of *water quality standards*. The Permittee shall implement and maintain:

- 1) *Sediment* control BMPs such as *detention* or retention ponds or traps, vegetated filter strips, bioswales, or other permanent *sediment* control BMPs to minimize *sediment* loads in *stormwater* discharges.
- 2) Filtration BMPs to remove solids from catch basins, sumps or other *stormwater* collection and conveyance system components (catch basin filter inserts, filter socks, modular canisters, sand filtration, centrifugal separators, etc.).

5. Sampling Plan

The SWPPP shall include a sampling plan. The plan shall:

- a. Identify points of *discharge* to surface water, *storm sewers*, or discrete *ground water* infiltration locations, such as dry wells or *detention* ponds.
- b. Include documentation of why applicable parameters are not sampled at each *discharge* point per S4.B.2.c (if applicable):
 - i. Location of which *discharge* points the Permittee does not sample applicable parameters because the *pollutant* concentrations are substantially identical to a discharge point being sampled.
 - ii. General industrial activities conducted in the drainage area of each *discharge* point.
 - iii. *Best Management Practices* conducted in the drainage area of each discharge point.
 - iv. Exposed materials located in the drainage area of each *discharge* point that are likely to be significant contributors of *pollutants* to *stormwater discharges*.
 - v. Impervious surfaces in the drainage area that could affect the percolation of *stormwater runoff* into the ground (e.g., asphalt, crushed rock, grass).
 - vi. Reasons why the Permittee expects the *discharge* points to discharge substantially identical effluents.
- c. Identify each sampling location by its unique identifying number such as A1, A2.
- d. Identify staff responsible for conducting *stormwater* sampling.

- e. Specify procedures for sample collection and handling.
- f. Specify procedures for sending samples to a laboratory.
- g. Identify parameters for analysis, holding times and preservatives, laboratory *quantitation levels*, and analytical methods.
- h. Specify the procedure for submitting results to *Ecology*.

S4. GENERAL SAMPLING REQUIREMENTS

A. General Requirements

The Permittee shall conduct sampling of *stormwater* in accordance with this permit and the SWPPP.

B. Sampling Requirements

1. Sample Timing and Frequency

- a. The Permittee shall sample the *discharge* from each designated location at least once per quarter:
 - 1st Quarter = January, February, and March
 - 2nd Quarter = April, May, and June
 - 3rd Quarter = July, August, and September
 - 4th Quarter = October, November, and December
- b. Permittees shall sample the *stormwater discharge* from the *first fall storm event* each year. "First fall storm event" means the first time on or after October 1st of each year that precipitation occurs and results in a *stormwater discharge* from a *facility*.
- c. Permittees shall collect samples within the first 12 hours of *stormwater discharge* events. If it is not possible to collect a sample within the first 12 hours of a *stormwater discharge* event, the Permittee must collect the sample as soon as practicable after the first 12 hours, and keep documentation with the sampling records (Condition S4.B.3) explaining why they could not collect samples within the first 12 hours; or if it is unknown (e.g., discharge was occurring during start of regular business hours).
- d. The Permittee shall obtain *representative samples*, which may be a single grab sample, a time-proportional sample, or a flow-proportional sample.
- e. Permittees need not sample outside of *regular business hours*, during unsafe conditions, or during quarters where there is no discharge, but shall submit a Discharge Monitoring Report each reporting period (Condition S9.A).

2. Sample Location(s)

- a. The Permittee shall designate sampling location(s) at the point(s) where it discharges *stormwater* associated with *industrial activity* off-site.

- b. The Permittee is not required to sample on-site discharges to ground (e.g., infiltration) or *sanitary sewer* discharges, unless specifically required by *Ecology* (Condition G12).
- c. The Permittee shall sample each distinct point of *discharge* off-site except as otherwise exempt from monitoring as a “*substantially identical discharge point*” per S3.B.5.b. If applicable, the Permittee is only required to monitor applicable parameters at one of the “substantially identical discharge points”.
- d. The Permittee shall notify *Ecology* of any changes or updates to sample locations, *discharge points*, and/or *outfalls* by submitting an “Industrial Stormwater General Permit Discharge/Sample Point Update Form” to *Ecology*.

3. Sample Documentation

For each *stormwater* sample taken, the Permittee shall record the following information and retain it on-site for *Ecology* review:

- a. Sample date.
- b. Sample time.
- c. A notation describing if the Permittee collected the sample within the first 12 hours of *stormwater* discharge events; or, if it is unknown (e.g., discharge was occurring during start of regular business hours).
- d. An explanation of why the Permittee could not collect a sample within the first 12 hours of a *stormwater discharge* event, if it was not possible. Or, if it is unknown, an explanation of why the Permittee does not know if a sample was collected within or outside the first 12 hours of stormwater discharge.
- e. Sample location (using SWPPP identifying number).
- f. Method of sampling, and method of sample preservation, if applicable.
- g. Individual who performed the sampling.
- h. Weather conditions.

4. Laboratory Documentation

The Permittee shall retain laboratory reports on-site for *Ecology* review and shall ensure that all laboratory reports providing data for all parameters include the following information:

- a. Date of analysis.
- b. Parameter name.
- c. CAS number, if applicable.
- d. Analytical method(s).
- e. Individual who performed the analysis.
- f. Method detection limit (MDL).
- g. Laboratory *quantitation level* (QL) achieved by the laboratory.

- h. Reporting units.
 - i. Sample result.
 - j. Quality assurance/quality control data.
5. The Permittee shall maintain the original records onsite and make them available to *Ecology* upon request.
 6. The Permittee may suspend sampling for one or more parameters (other than “visible oil sheen”) for a period of three years (12 quarters) based on consistent attainment of *benchmark* values when:
 - a. Eight consecutive quarterly samples demonstrate a reported value equal to or less than the *benchmark* value; or for pH, within the range of 5.0 – 9.0.
 - b. For purposes of tallying “consecutive quarterly samples”:
 - i. Do not include any quarters in which the Permittee did not collect a sample, but should have (e.g., discharge(s) occurred during normal working hours, and during safe conditions; but no sample was collected during the entire quarter). If this occurs, the tally of consecutive quarterly samples is reset to zero.
 - ii. Do not include any quarters in which the Permittee did not collect a sample because there was no *discharge* during the quarter (or the discharges during the quarter occurred outside normal working hours or during unsafe conditions). These quarters are not included in the calculation of eight consecutive quarters, but do not cause the tally to be reset; i.e., they are skipped over.
 - c. Permittees monitoring more than once per quarter shall average all of the monitoring results for each parameter (except pH and “visible oil sheen”) and compare the average value to the *benchmark* value. However, if Permittees collect more than one sample during a 24-hour period, they must first calculate the *daily average* of the individual grab sample results collected during that 24-hour period; then use the *daily average* to calculate a quarterly average.
 7. A Permittee who has a *significant process change* shall not use previous sampling results to demonstrate consistent attainment.
 8. Suspension of sampling based on consistent attainment *does not* apply to *pollutant* parameters subject to numeric effluent limits based on federal Effluent Limitation Guidelines (Condition S5.C) or Section 303(d) of the *Clean Water Act* (Condition S6).

C. Analytical Procedures for Sampling Requirements

The Permittee shall ensure that analytical methods used to meet the sampling requirements in this permit conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136, unless specified otherwise in this permit.

D. Laboratory Accreditation

1. The Permittee shall ensure that all analytical data required by *Ecology* is prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, Chapter 173-50 WAC.
2. *Turbidity* and pH are exempt from this requirement, unless the laboratory must be registered or accredited for any other parameter.

S5. BENCHMARKS, EFFLUENT LIMITATIONS, AND SPECIFIC SAMPLING REQUIREMENTS

A. Benchmarks and Sampling Requirements

1. Permittees shall sample their *stormwater discharges* as specified in Condition S4 and as specified in Table 2.
2. Additional sampling and/or requirements apply to specific industrial categories (S5.B), and facilities subject to effluent limitation guidelines (S5.C), and certain discharges to impaired waters (S6).
3. If a Permittee's discharge exceeds a *benchmark* listed in Table 2, the Permittee shall take the actions specified in Condition S8. Permittees sampling more than once per quarter shall average the sample results for each parameter (except pH and “visible oil sheen”) and compare the average value to the *benchmark* to determine if the discharge has exceeded a *benchmark* value. However, if Permittees collect more than one sample during a 24-hour period, they must first calculate the *daily average* of the individual grab sample results collected during that 24-hour period; then use the *daily average* to calculate a quarterly average.

Table 2: Benchmarks and Sampling Requirements Applicable to All Facilities

| Parameter | Units | Benchmark Value | Analytical Method | Laboratory Quantitation Level ^a | Minimum Sampling Frequency ^b |
|---------------|----------------|----------------------------------|--------------------------|--|---|
| Turbidity | NTU | 25 | EPA 180.1 Meter | 0.5 | 1/quarter |
| pH | Standard Units | Between 5.0 and 9.0 | Meter/Paper ^c | ±0.5 | 1/quarter |
| Oil Sheen | Yes/No | No Visible Oil Sheen | N/A | N/A | 1/quarter |
| Copper, Total | µg/L | Western WA: 14 Eastern WA: 32 | EPA 200.8 | 2.0 | 1/quarter |
| Zinc, Total | µg/L | 117 | EPA 200.8 | 2.5 | 1/quarter |

a. The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the DMR. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific method detection level (MDL) and QL on the DMR.

b. 1/quarter means at least one sample taken each quarter, year-round.

c. Permittees shall use either a calibrated pH meter or narrow-range pH indicator paper with a resolution not greater than ± 0.5 SU.

B. Additional Sampling Requirements for Specific Industrial Groups

1. In addition to the requirements in Table 2, all Permittees identified by an *industrial activity* in Table 3 shall sample *stormwater* discharges as specified in Condition S4 and in Table 3.
2. If a *discharge* exceeds a *benchmark* listed in Table 3, the Permittee shall take the actions specified in Condition S8. Permittees sampling more than once per quarter shall average the sample results for each parameter and compare the average value to the *benchmark* to determine if the discharge has exceeded a *benchmark*. However, if Permittees collect more than one sample during a 24-hour period, they must first calculate the *daily average* of the individual grab sample results collected during that 24-hour period; then use the *daily average* to calculate a quarterly average.

Table 3: Additional Benchmarks and Sampling Requirements Applicable to Specific Industries

| Parameter | Units | Benchmark Value | Analytical Method | Laboratory Quantitation Level ^a | Minimum Sampling Frequency ^b |
|--|-------|-----------------|-------------------|--|---|
| 1. Chemical and Allied Products (28xx), Food and Kindred Products (20xx) | | | | | |
| BOD ₅ | mg/L | 30 | SM 5210B | 2 | 1/quarter |
| Nitrate + Nitrite Nitrogen, as N | mg/L | 0.68 | SM4500 NO3-E/F/H | 0.10 | 1/quarter |
| Phosphorus, Total | mg/L | 2.0 | EPA 365.1 | 0.10 | 1/quarter |
| 2. Primary Metals(33xx), Metals Mining (10xx), Automobile Salvage and Scrap Recycling (5015 and 5093), Metals Fabricating (34xx) | | | | | |
| Lead, Total | µg/L | 81.6 | EPA 200.8 | 0.5 | 1/quarter |
| Petroleum Hydrocarbons (Diesel Fraction) | mg/L | 10 | NWTPH-Dx | 0.1 | 1/quarter |
| 3. Hazardous Waste Treatment, Storage and Disposal Facilities and Dangerous Waste Recyclers subject to the provisions of Resource Conservation and Recovery Act (RCRA) Subtitle C | | | | | |
| Chemical Oxygen Demand (COD) | mg/L | 120 | SM5220-D | 10 | 1/quarter |
| Total Ammonia (as N) | mg/L | 2.1 | SM4500-NH3- GH | 0.3 | 1/quarter |
| TSS | mg/L | 100 | SM2540-D | 5 | 1/quarter |
| Arsenic, Total | µg/L | 150 | EPA 200.8 | 0.5 | 1/quarter |
| Cadmium, Total | µg/L | 2.1 | EPA 200.8 | 0.25 | 1/quarter |
| Cyanide, Total | µg/L | 22 | EPA 335.4 | 10 | 1/quarter |
| Lead, Total | µg/L | 81.6 | EPA 200.8 | 0.5 | 1/quarter |
| Magnesium, Total | µg/L | 64 | EPA 200.8 | 50 | 1/quarter |
| Mercury, Total | µg/L | 1.4 | EPA 1631E | 0.0005 | 1/quarter |
| Selenium, Total | µg/L | 5.0 | EPA 200.8 | 1.0 | 1/quarter |
| Silver, Total | µg/L | 3.8 | EPA 200.8 | 0.2 | 1/quarter |
| Petroleum Hydrocarbons (Diesel Fraction) | mg/L | 10 | NWTPH-Dx | 0.1 | 1/quarter |
| 4. Air Transportation^c (45xx) | | | | | |
| Total Ammonia (as N) | mg/L | 2.1 | SM4500-NH3- GH | 0.3 | 1/quarter |
| BOD ₅ | mg/L | 30 | SM 5210B | 2 | 1/quarter |
| COD | mg/L | 120 | SM5220-D | 10 | 1/quarter |
| Nitrate + Nitrite Nitrogen, as N | mg/L | 0.68 | SM 4500-NO3-E/F/H | 0.10 | 1/quarter |
| Petroleum Hydrocarbons (Diesel Fraction) | mg/L | 10 | NWTPH-Dx | 0.1 | 1/quarter |

| Parameter | Units | Benchmark Value | Analytical Method | Laboratory Quantitation Level ^a | Minimum Sampling Frequency ^b |
|--|-------|-----------------|-------------------|--|---|
| 5. Timber Product Industry (24xx), Paper and Allied Products (26xx) | | | | | |
| COD | mg/L | 120 | SM5220-D | 10 | 1/quarter |
| TSS | mg/L | 100 | SM2540-D | 5 | 1/quarter |
| 6. Transportation (40xx – 44xx, except 4221-25), Petroleum Bulk Stations and Terminals (5171) | | | | | |
| Petroleum Hydrocarbons (Diesel Fraction) | mg/L | 10 | NWTPH-Dx | 0.1 | 1/quarter |

- a. The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the DMR. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific method detection level (MDL) and QL on the DMR.
- b. 1/quarter means at least one sample taken each quarter, year-round.
- c. For airports where a single Permittee, or a combination of permitted facilities use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis, monitor these additional five parameters in those *discharge points* that collect runoff from areas where deicing activities occur (SIC 4512-4581).

C. Landfills and Airports Subject to Effluent Limitation Guidelines

1. Permittees with discharges from the following activities shall comply with the effluent limits and monitor as specified in Condition S4 and Tables 4 and 5.
2. The *discharge* of the *pollutants* at a level more than that identified and authorized by this permit for these activities shall constitute a violation of the terms and conditions of this permit.
3. Permittees operating non-hazardous waste *landfills* subject to the provisions of 40 CFR Part 445 Subpart B shall not exceed the effluent limits⁴ listed in Table 4.

⁴ As set forth in 40 CFR Part 445 Subpart B, these numeric effluent limits apply to contaminated *stormwater* discharges from Municipal Solid Waste Landfills that have not been closed in accordance with 40 CFR 258.60, and to contaminated *stormwater* discharges from those landfills that are subject to the provisions of 40 CFR Part 257 except for discharges from any of the following facilities: (a) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill; (b) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation, or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation; (c) landfills operated in conjunction with CWT facilities subject to 40 CFR Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or (d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

Table 4: Effluent Limits Applicable to Non-Hazardous Waste Landfills Subject to 40 CFR Part 445 Subpart B

| Parameter | Units | Average Monthly ^a | Maximum Daily ^b | Analytical Method ^c | Laboratory Quantitation Level ^d | Minimum Sampling Frequency ^e |
|---------------------------|-------|------------------------------|----------------------------|--------------------------------|--|---|
| BOD ₅ | mg/L | 37 | 140 | EPA 405.1 or SM 5210B | 2 | 1/quarter |
| TSS | mg/L | 27 | 88 | SM2540-D | 5 | 1/quarter |
| Total Ammonia (as N) | mg/L | 4.9 | 10 | SM4500-NH ₃ -GH. | 0.3 | 1/quarter |
| Alpha Terpineol | µg/L | 16 | 33 | EPA 625 | 5 | 1/quarter |
| Benzoic Acid | µg/L | 71 | 120 | EPA 625 | 50 | 1/quarter |
| p-Cresol (4-methylphenol) | µg/L | 14 | 25 | EPA 8270D | 10 µg/L | 1/quarter |
| Phenol | µg/L | 15 | 26 | EPA 625 | 4.0 | 1/quarter |
| Zinc, Total | µg/L | 110 | 200 | EPA 200.8 | 2.5 | 1/quarter |
| pH | SU | Between 6.0 and 9.0 | | Meter | ±0.1 | 1/quarter |

- ^a. Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured. If only one sample is taken during the calendar month, the average monthly effluent limitation applies to that sample. If only one sample is taken during the reporting period, the average monthly effluent limitation applies to that sample.
- ^b. Maximum daily effluent limit means the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. The daily discharge is the average measurement of the pollutant over the day; this does not apply to pH.
- ^c. Or other equivalent EPA-approved method with the same or lower quantitation level.
- ^d. The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the discharge monitoring report.
- ^e. 1/quarter means at least one sample taken each quarter, year-round.

4. Permittees operating airlines and airports subject to provisions of 40 CFR Part 449 shall comply with the following:
 - a. *Airfield Pavement Deicing*. Existing and new primary airports with 1,000 or more annual jet departures (*annual non-propeller aircraft departures*) that discharge wastewater associated with *airfield* pavement *deicing* commingled with stormwater must either use non-urea-containing deicers⁵, or meet the effluent limit in Table 5 at every *discharge point*, prior to any dilution or any commingling with any non-*deicing* discharge.

Table 5: Effluent Limit Applicable to Airports Subject to 40 CFR Part 449

| Parameter | Units | Maximum Daily ^a | Analytical Method ^b | Laboratory Quantitation Level ^c | Minimum Sampling Frequency ^d |
|----------------------|-------|----------------------------|--------------------------------|--|---|
| Total Ammonia (as N) | mg/L | 14.7 | SM4500-NH3-GH. | 0.3 | 1/quarter |

- a. Maximum daily effluent limit means the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. The daily discharge is the average measurement of the pollutant over the day.
- b. Or other equivalent EPA-approved method with the same or lower quantitation level.
- c. The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the DMR. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific method detection level (MDL) and QL on the DMR.
- d. 1/quarter means at least one sample taken each quarter, year-round.

D. Conditionally Authorized Non-Stormwater Discharges

1. The categories and sources of non-*stormwater* discharges identified in Condition S5. D.2, below, are conditionally authorized, provided:
 - a. The *discharge* is otherwise consistent with the terms and conditions of this permit, including Condition S5, S6 and S10.
 - b. The Permittee conducts the following assessment for each non-*stormwater discharge* (except for S5.D.2.a & f) and documents the assessment in the SWPPP, consistent with Condition S3.B.2. The Permittee shall:
 - i. Identify each source.
 - ii. Identify the location of the discharge into the *stormwater* collection system.
 - iii. Characterize the discharge including estimated flows or flow volume, and likely *pollutants* which may be present.
 - iv. Evaluate and implement available and reasonable *source control BMPs* to reduce or eliminate the discharge.

⁵ Affected Permittees must certify in its annual report that it does not use *airfield deicing* products that contain urea, or meet the numeric limit in Table 5 (Condition S9.B.4).

- v. Evaluate compliance of the *discharge* with the state *water quality standards*.
 - vi. Identify appropriate BMPs for each discharge to control *pollutants* and or flow volumes.
2. Conditionally authorized non-*stormwater* discharges include:
- a. Discharges from fire fighting activities.
 - b. Fire protection system flushing, testing, and maintenance.
 - c. Discharges of potable water including water line flushing, provided that water line flushing must be de-chlorinated prior to discharge.
 - d. Uncontaminated air conditioning or compressor condensate.
 - e. Landscape watering and irrigation drainage.
 - f. Uncontaminated *ground water* or spring water.
 - g. Discharges associated with dewatering of foundations, footing drains, or utility vaults where flows are not contaminated with process materials such as solvents.
 - h. Incidental windblown mist from cooling towers that collects on rooftops or areas adjacent to the cooling tower. This does not include intentional discharges from cooling towers such as piped cooling tower blow down or drains.

E. Prohibited Discharges

Unless authorized by a separate NPDES or state waste *discharge* permit, the following discharges are prohibited:

- 1. The discharge of *process wastewater* is not authorized. *Stormwater* that commingles with *process wastewater* is considered *process wastewater*.
- 2. *Illicit discharges* are not authorized by this permit. Conditionally authorized non-*stormwater* discharges in compliance with Condition S5.D are not *illicit discharges*.

F. General Prohibitions

Permittees shall manage *stormwater* to prevent the *discharge* of:

- 1. Synthetic, natural or processed oil or oil-containing products as identified by an oil sheen; and
- 2. Trash and floating debris.

S6. DISCHARGES TO IMPAIRED WATERS

A. General Requirements for Discharges to Impaired Waters

Permittees that *discharge* to an impaired *waterbody*, either directly or indirectly through a *stormwater drainage system*, shall conduct sampling and inspections in accordance with Conditions S4, S5, S6, and S7.

B. Eligibility for Coverage of New Discharges to Impaired Waters

Facilities that meet the definition of “*new discharger*” and *discharge* to a 303(d)-listed *waterbody* (Category 5), an impaired *waterbody* with an *applicable TMDL* (Category 4A), or a pollution control program for sediment cleanup (i.e., a Category 4B sediment-impaired *waterbody*) are not eligible for coverage under this permit unless the *facility*:

1. Prevents all exposure to *stormwater* of the *pollutant(s)* for which the *waterbody* is impaired, and retains documentation of procedures taken to prevent exposure onsite with its SWPPP; or
2. Documents that the *pollutant(s)* for which the *waterbody* is impaired is not present at the *facility*, and retains documentation of this finding with the SWPPP; or
3. Provides *Ecology* with data to support a showing that the *discharge* is not expected to cause or contribute to an exceedance of a water quality standard, and retain such data onsite with its SWPPP. The *facility* must provide data and other technical information to *Ecology* sufficient to demonstrate:
 - a. For discharges to waters without an *EPA* approved or established *TMDL*, that the *discharge* of the *pollutant* for which the water is impaired will meet instream water quality criteria at the point of discharge to the *waterbody*; or
 - b. For discharges to waters with an *EPA* approved or established *TMDL*, that there are sufficient remaining *wasteload allocations* in an *EPA* approved or established *TMDL* to allow industrial *stormwater discharge* and that existing *dischargers* to the *waterbody* are subject to compliance schedules designed to bring the *waterbody* into attainment with *water quality standards*.

Facilities are eligible for coverage under this permit if *Ecology* issues permit coverage based upon an affirmative determination that the *discharge* will not cause or contribute to the existing impairment.

C. Additional Sampling Requirements and Effluent Limits for Discharges to Certain Impaired Waters and Puget Sound Sediment Cleanup Sites

1. Permittees discharging to a 303(d)-listed *waterbody* (Category 5), either directly or indirectly through a *stormwater drainage system*, shall comply with the applicable sampling requirements and numeric effluent limits in Table 6. If a *discharge point* is subject to an impaired *waterbody* effluent limit (Condition S6.C) for a parameter that also has a benchmark, the effluent limit supersedes the benchmark.
 - a. Facilities subject to these limits include, but may not be limited to, facilities listed in Appendix 4.
 - b. For purposes of this condition, “applicable sampling requirements and effluent limits” means the sampling and effluent limits in Table 6 that correspond to the specific parameter(s) the receiving water is 303(d)-listed for at the time of permit coverage, or Total Suspended Solids (TSS) if the *waterbody* is 303(d)-listed (Category 5) for *sediment* quality at the time of permit coverage.

- c. For *discharge points* not subject to a TSS effluent limit under the 2010 ISGP, the TSS effluent limit in Table 6 does not become effective until January 1, 2017. However, TSS sampling and reporting is effective January 2, 2015; or, for Permittees with an effective date of permit coverage after January 2, 2015, the first full quarter following permit coverage.

Table 6: Sampling and Effluent Limits Applicable to Discharges to 303(d)-listed Waters

| Parameter | Units | Maximum Daily ^a | | Analytical Method ^b | Laboratory Quantitation Level ^c | Sampling Frequency ^d |
|-------------------------|-------------------|----------------------------|---------------------|--------------------------------|--|---------------------------------|
| | | Freshwater | Marine | | | |
| Turbidity | NTUs | 25 | 25 | EPA 180.1 Meter | 0.5 | 1/quarter |
| pH | SU | j | Between 7.0 and 8.5 | Meter | ±0.1 | 1/quarter |
| Fecal Coliform Bacteria | # colonies/100 mL | i | i | SM 9222D | 20 CFU/100 mL | 1/quarter |
| TSS ^f | mg/L | 30 | 30 | SM2540-D | 5 | 1/quarter |
| Phosphorus, Total | mg/L | g | g | EPA 365.1 | 0.01 | 1/quarter |
| Total Ammonia (as N) | mg/L | g | g | SM 4500 NH ³ -GH | 0.3 | 1/quarter |
| Copper, Total | µg/L | g | g | EPA 200.8 | 2.0 | 1/quarter |
| Lead, Total | µg/L | g | g | EPA 200.8 | 0.5 | 1/quarter |
| Mercury, Total | µg/L | 2.1 | 1.8 | EPA1631E | 0.0005 | 1/quarter |
| Zinc, Total | µg/L | g | g | EPA 200.8 | 2.5 | 1/quarter |
| Pentachlorophenol | µg/L | 9 ^h | g | EPA 625 | 1.0 | 1/quarter |

^a Maximum daily effluent limit means the highest allowable daily discharge. The daily *discharge* means the *discharge of a pollutant* measured during a calendar day. The daily discharge is the average measurement of the *pollutant* over the day; this does not apply to pH.

^b Or other equivalent method with the same reporting level.

^c The Permittee shall ensure laboratory results comply with the *quantitation level* (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the DMR. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific method detection level (MDL) and QL on the DMR.

^d 1/quarter means at least one sample taken each quarter, e.g., Q1 = Jan 1 – March 31, Q2 = April 1 – June 30.

^e Permittees shall use either a calibrated pH meter consistent with EPA 9040 or an approved state method.

^f Permittees who discharge to a waterbody 303(d)-listed (Category 5) for *sediment* quality shall sample the *discharge* for TSS.

^g Site-specific effluent limitation will be assigned at the time of permit coverage.

^h Based on a pH of 7.0.

ⁱ A numeric effluent limit does not apply, but Permittees must sample according to Table 6. In addition, the following mandatory BMPs shall be incorporated into the SWPPP and implemented; the Permittee must:

- 1) Use all known, available and reasonable methods to prevent rodents, birds, and other animals from feeding/nesting/roosting at the facility. Nothing in this section shall be construed as allowing violations of any applicable federal, state or local statutes, ordinances, or regulations including the Migratory Bird Treaty Act.
- 2) Perform at least one annual dry weather inspection of the stormwater system to identify and eliminate sanitary sewer cross-connections.
- 3) Install structural source control BMPs to address on-site activities and sources that could cause bacterial contamination (e.g., dumpsters, compost piles, food waste, and animal products).
- 4) Implement operational source control BMPs to prevent bacterial contamination from any known sources of fecal coliform bacteria (e.g., animal waste).

S6.C.2

- 5) Conduct additional bacteria-related sampling and/or BMPs, if ordered by Ecology on a case-by-case basis.
- j. The effluent limit for a Permittee who discharges to a freshwater body 303(d)-listed for pH is: Between 6.0 and 8.5, if the 303(d)-listing is for high pH only; Between 6.5 and 9.0, if the 303(d)-listing is for low pH only; and Between 6.5 and 8.5 if the 303(d)-listing is for both low and high pH. All pH effluent limits are applied end-of-pipe.
2. Permittees discharging to a *Puget Sound Sediment Cleanup Site*⁶, either directly or indirectly through a *stormwater drainage system*, shall comply with this section:
 - a. Permittees shall sample the discharge for Total Suspended Solids (TSS) in accordance with Table 7.
 - b. If the waterbody is listed within Category 5 (sediment medium) where the *outfall* discharges to the waterbody, the discharge is subject to the TSS numeric effluent limit in S6.C.1.c and Table 6.
 - c. If the waterbody is not listed within Category 5 (sediment medium) where the *outfall* discharges to the waterbody, the discharge is subject to the TSS *benchmark* in Table 7. If the discharge is subject to more than one TSS benchmark value, the lower benchmark supersedes the higher one. Beginning January 1, 2017, if a *discharge* exceeds the TSS benchmark, the Permittee shall comply with Condition S8.

Table 7: Benchmarks and Sampling Requirements Applicable to Discharges to Puget Sound Sediment Cleanup Sites that are not Category 5 for Sediment Quality

| Parameter | Units | Benchmark Value ^a | Analytical Method | Laboratory Quantitation Level ^b | Minimum Sampling Frequency ^c |
|-----------|-------|------------------------------|-------------------|--|---|
| TSS | mg/L | 30 | SM2540-D | 5 | 1/quarter |

- ^a. Permittees sampling more than once per quarter shall average the sample results and compare the average value to the benchmark to determine if the discharge has exceeded the benchmark value. However, if Permittees collect more than one sample during a 24-hour period, they must first calculate the daily average of the individual grab sample results collected during that 24-hour period; then use the daily average to calculate a quarterly average.
- ^b. The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method from 40 CFR Part 136 is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on the DMR. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific method detection level (MDL) and QL on the DMR.
- ^c. 1/quarter means at least one sample taken each quarter, year-round.

⁶**Puget Sound Sediment Cleanup Site** means: Category 4B (Sediment) portions of Budd Inlet (Inner), Commencement Bay (Inner), Commencement Bay (Outer), Dalco Passage and East Passage, Duwamish Waterway (including East and West Waterway), Eagle Harbor, Elliot Bay, Hood Canal (North), Liberty Bay, Rosario Strait, Sinclair Inlet, and Thea Foss Waterway; Category 5 (Sediment) portions of the Duwamish Waterway (including East and West Waterway), and Port Gardner and Inner Everett Harbor; and the Port Angeles Harbor sediment cleanup area, as mapped on Ecology's ISGP website. All references to Category 4B and 5 pertain to the 2012 EPA-approved Water Quality Assessment.

- d. Permittees shall remove accumulated solids from storm drain lines (including inlets, catch basins, sumps, conveyance lines, and oil/water separators) owned or controlled by the Permittee at least once prior to October 1, 2016.

Permittees shall conduct line cleaning operations (e.g., jetting, vacuuming, removal, loading, storage, and/or transport) using BMPs to prevent discharges of storm drain solids to surface waters of the state.

Removed storm drain solids and liquids shall be disposed of in accordance with applicable laws and regulations and documented in the SWPPP.

- i. If a Permittee can demonstrate that line cleaning operations are not feasible by the October 1, 2016 deadline, Ecology may approve a time extension by approving a modification of permit coverage.
 - ii. If a Permittee can demonstrate, based on video inspection, in-line storm drain solids sampling, or other documentation, that storm drain line cleaning is not necessary to prevent downstream sediment contamination or recontamination, Ecology may waive this requirement by approving a modification of permit coverage.
 - iii. Requests for line cleaning waivers or time extensions must be accompanied by a modification of coverage form, and a detailed technical basis to support the request. The due date for line cleaning waiver and extension requests is May 15, 2016.
- e. Permittees shall sample and analyze storm drain solids in accordance with Table 8 at least once prior to October 1, 2016. Storm drain solids must be collected/sampled from a representative catch basin, sump, pipe, or other feature within the storm drain system that corresponds to the *discharge point* where Total Suspended Solids (TSS) samples are collected per Condition S6.C. Samples may be either a single grab sample or a composite sample. Samples must be representative of the storm drain solids generated and accumulated in the facility's drainage system. To the extent possible, sample locations must exclude portions of the drainage system affected by water from off-site sources (e.g., run-on from off-site properties, tidal influence, backflow).
- i. If a Permittee can demonstrate that storm drain solids sampling and analysis is not feasible by the October 1, 2016 deadline, Ecology may approve a time extension by approving a modification of permit coverage.
 - ii. If a Permittee can demonstrate that storm drain solids sampling and analysis is not feasible or not necessary, Ecology may waive this requirement by approving a modification of permit coverage.
 - iii. Requests for storm drain solids sampling and analysis waivers or time extensions must be accompanied by a modification of coverage form, and a detailed technical basis to support the request. The due date for solids sampling and analysis waiver and extension requests is May 15, 2016.

Table 8: Sampling and Analytical Procedures for Storm Drain Solids

| Analyte | Method in Sediment | Quantitation Level ^a |
|------------------------------------|--|---------------------------------|
| Conventional Parameters | | |
| Percent total solids | SM 2540G, or ASTM Method D 2216 | NA |
| Total organic carbon | Puget Sound Estuary Protocols (PSEP 1997), or EPA 9060 | 0.1% |
| Grain size | Ecology Method Sieve and Pipette (ASTM 1997), ASTM D422, or PSEP 1986/2003 | NA |
| Metals | | |
| Antimony, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 0.2 mg/kg dw ^b |
| Arsenic, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 0.1 mg/kg dw |
| Beryllium, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 0.2 mg/kg dw |
| Cadmium, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 0.2 mg/kg dw |
| Chromium, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 0.5 mg/kg dw |
| Copper, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 0.2 mg/kg dw |
| Lead, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 0.2 mg/kg dw |
| Mercury, Total | EPA Method 1631E, or EPA Method 7471B | 0.005 mg/kg dw |
| Nickel, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 0.1 mg/kg dw |
| Selenium, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 0.5 mg/kg dw |
| Silver, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 0.1 mg/kg dw |
| Thallium, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 0.2 mg/kg dw |
| Zinc, Total | EPA Method 200.8 (ICP/MS) , EPA Method 6010 or EPA Method 6020 | 5.0 mg/kg dw |
| Organics | | |
| PAH compounds ^c | EPA Method 8270 D | 70 µg/kg dw |
| PCBs (aroclor), Total ^d | EPA Method 8082 | 10 µg/kg dw |
| Petroleum Hydrocarbons | | |
| NWTPH-Dx | NWTPH-Dx | 25.0-100.0 mg/kg dw |

^a The Permittee shall ensure laboratory results comply with the quantitation level (QL) specified in the table. However, if an alternate method is sufficient to produce measurable results in the sample, the Permittee may use that method for analysis. If the Permittee uses an alternative method it must report the test method and QL on

the sediment monitoring report. All results shall be reported. For values below the QL, or where a QL is not specified, report results at the method detection level (MDL) from the lab and the qualifier of "U" for undetected at that concentration. If the Permittee is unable to obtain the required QL due to matrix effects, the Permittee must report the matrix-specific MDL and QL on the DMR.

- b. dw = dry weight.
- c. PAH compounds include: 1-methylnaphthalene, 2-methylnaphthalene, 2-chloronaphthalene, acenaphthylene, acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b, k)fluoranthene, benzo(ghi)perylene, dibenzo(a,h)anthracene, dibenzofuran, carbazole, chrysene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene.
- d. Total = sum of PCB aroclors 1016+1221+1232+1242+1248+1254+1260.

- f. All storm drain solids sampling data shall be reported to Ecology on a Solids Monitoring Report (SMR) no later than the DMR due date for the reporting period in which the solids were sampled, in accordance with Condition S9.A. A copy of the lab report shall be submitted to Ecology with the SMR.

D. Requirements for Discharges to Waters with Applicable TMDLs

1. The Permittee shall comply with *applicable TMDL* determinations. *Applicable TMDLs* or *TMDL* determinations are *TMDLs* which have been completed by the issuance date of this permit, or which have been completed prior to the date that the Permittee's *application* is received by *Ecology*, whichever is later. *Ecology* will list the Permittee's requirements to comply with this condition on the letter of permit coverage.
2. *TMDL* requirements associated with *TMDLs* completed after the issuance date of this permit only become effective if they are imposed through an administrative order issued by *Ecology*.
3. Where *Ecology* has established a *TMDL wasteload allocation* and sampling requirements for the Permittee's discharge, the Permittee shall comply with all requirements of the *TMDL* as listed in Appendix 5.
 - a. If a *discharge point* is subject to a *TMDL*-related effluent limit (Condition S6.D) for a parameter that also has a benchmark (Condition S5), the effluent limit supersedes the benchmark.
4. Where *Ecology* has established a *TMDL general wasteload allocation* for industrial *stormwater* discharges for a parameter present in the Permittee's discharge, but has not identified specific requirements, *Ecology* will assume the Permittee's compliance with the terms and conditions of the permit complies with the approved *TMDL*.
5. Where *Ecology* has not established a *TMDL wasteload allocation* for industrial *stormwater* discharges for a parameter present in the Permittee's discharge, but has not excluded these discharges, *Ecology* will assume the Permittee's compliance with the terms and conditions of this permit complies with the approved *TMDL*.
6. Where a *TMDL* for a parameter present in the Permittee's *discharge* specifically precludes or prohibits discharges of *stormwater* associated with *industrial activity*, the Permittee is not eligible for coverage under this permit.

S7. INSPECTIONS

A. Inspection Frequency and Personnel

1. The Permittee shall conduct and document visual inspections of the site each month.
2. The Permittee shall ensure that inspections are conducted by *qualified personnel*.

B. Inspection Components

Each inspection shall include:

1. Observations made at *stormwater* sampling locations and areas where *stormwater* associated with *industrial activity* is discharged off-site; or discharged to *waters of the state*, or to a *storm sewer* system that drains to *waters of the state*.
2. Observations for the presence of floating materials, visible oil sheen, discoloration, *turbidity*, odor, etc. in the *stormwater* discharge(s).
3. Observations for the presence of *illicit discharges* such as *domestic wastewater*, *noncontact cooling water*, or *process wastewater* (including *leachate*).
 - a. If an *illicit discharge* is discovered, the Permittee shall notify *Ecology* within seven days.
 - b. The Permittee shall eliminate the *illicit discharge* within 30 days.
4. A verification that the descriptions of potential *pollutant* sources required under this permit are accurate.
5. A verification that the site map in the SWPPP reflects current conditions.
6. An assessment of all BMPs that have been implemented, noting all of the following:
 - a. Effectiveness of BMPs inspected.
 - b. Locations of BMPs that need maintenance.
 - c. Reason maintenance is needed and a schedule for maintenance.
 - d. Locations where additional or different BMPs are needed and the rationale for the additional or different BMPs.

C. Inspection Results

1. The Permittee shall record the results of each inspection in an inspection report or checklist and keep the records on-site, as part of the SWPPP, for *Ecology* review. The Permittee shall ensure each inspection report documents the observations, verifications and assessments required in S7.B and includes:
 - a. Time and date of the inspection.
 - b. Locations inspected.
 - c. Statements that, in the judgment of 1) the person conducting the site inspection, and 2) the person described in Condition G2., the site is either in compliance or out of compliance with the terms and conditions of the SWPPP and this permit.

- d. A summary report and a schedule of implementation of the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.
- e. Name, title, and signature of the person conducting site inspection; and the following statement: "I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."
- f. Certification and signature of the person described in Condition G2.A, or a duly authorized representative of the *facility*, in accordance with Condition G2.B and D.

D. Reports of Non-Compliance

The Permittee shall prepare reports of non-compliance identified during an inspection in accordance with the requirements of Condition S9.E.

S8. CORRECTIVE ACTIONS

A. Implementation of Source Control and Treatment BMPs from Previous Permit

In addition to the Corrective Action Requirements of S8.B-D, Permittees shall implement any applicable Level 1, 2 or 3 Responses required by the previous Industrial Stormwater *General Permit(s)*. Permittees shall continue to operate and/or maintain any source control or *treatment BMPs* related to Level 1, 2 or 3 Responses implemented prior to the effective date of this permit.

B. Level One Corrective Actions – Operational Source Control BMPs

Permittees that exceed any applicable *benchmark* value(s) in Table 2, Table 3 and/or Table 7 for any quarter shall complete a Level 1 Corrective Action for each parameter exceeded in accordance with the following:

1. Within 14 days of receipt of sampling results that indicate a benchmark exceedance for a given quarter⁷; or, for parameters other than pH or visible oil sheen, the end of the quarter, whichever is later:
 - a. Conduct an inspection to investigate the cause.
 - b. Review the SWPPP and ensure that it fully complies with Permit Condition S3, and contains the correct BMPs from the applicable *Stormwater Management Manual*.
 - c. Make appropriate revisions to the SWPPP to include additional *Operational Source Control BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges.
2. Summarize the Level 1 Corrective Actions in the Annual Report (Condition S9.B).

⁷ Based on quarterly average per Condition S5.A.3, S5.B.2 and/or S6.C.2.c. For pH and visible oil sheen, quarterly averaging is not allowed, so the 14 days begin upon receipt of a single benchmark exceedance.

3. **Level One Deadline:** The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than the DMR due date for the quarter the *benchmark* was exceeded.

C. Level Two Corrective Actions – Structural Source Control BMPs

Permittees that exceed an applicable *benchmark* value in Table 2, Table 3 and/or Table 7 (for a single parameter) for any two quarters during a calendar year shall complete a Level 2 Corrective Action in accordance with S8.C. Alternatively, the Permittee may skip Level 2 and complete a Level 3 Corrective Action in accordance with Condition S8.D.

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3.
2. Make appropriate revisions to the SWPPP to include additional *Structural Source Control BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges.
3. Summarize the Level 2 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B).
4. **Level 2 Deadline:** The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than August 31st the following year.
 - a. If installation of necessary *Structural Source Control BMPs* is not feasible by August 31st the following year, *Ecology* may approve additional time by approving a *Modification of Permit Coverage*.
 - b. If installation of *Structural Source Control BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, *Ecology* may waive the requirement for additional *Structural Source Control BMPs* by approving a *Modification of Permit Coverage*.
 - c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a *Modification of Coverage* form to *Ecology* in accordance with Condition S2.B, by May 15th prior to Level 2 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.
 - d. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.
 - e. For the year following the calendar year the Permittee triggered a Level 2 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

D. Level Three Corrective Actions – Treatment BMPs

Permittees that exceed an applicable *benchmark* value in Table 2, Table 3 and/or Table 7 (for a single parameter) for any three quarters during a calendar year shall complete a

Level 3 Corrective Action in accordance with S8.D. A Level 2 Corrective Action is not required.

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3.
2. Make appropriate revisions to the SWPPP to include additional *Treatment BMPs* with the goal of achieving the applicable *benchmark* value(s) in future discharges. Revisions shall include additional operational and/or structural source control BMPs if necessary for proper performance and maintenance of *Treatment BMPs*.

A *Qualified Industrial Stormwater Professional* shall review the revised SWPPP, sign the SWPPP Certification Form, and certify that it is reasonably expected to meet the ISGP benchmarks upon implementation. Upon written request Ecology may, one time during the permit cycle, waive this requirement on a case-by-case basis if a Permittee demonstrates to Ecology's satisfaction that the proposed Level 3 treatment BMPs are reasonably expected to meet ISGP benchmarks upon implementation.

3. Before installing treatment BMPs that require the site-specific design or sizing of structures, equipment, or processes to collect, convey, treat, reclaim, or dispose of industrial stormwater; the Permittee shall submit an engineering report to Ecology for review.
 - a. The engineering report must include:
 - i. Brief summary of the treatment alternatives considered and why the proposed option was selected. Include cost estimates of ongoing operation and maintenance, including disposal of any spent media;
 - ii. The basic design data, including characterization of stormwater influent, and sizing calculations of the treatment units;
 - iii. A description of the treatment process and operation, including a flow diagram;
 - iv. The amount and kind of chemicals used in the treatment process, if any. Note: Use of stormwater treatment chemicals requires submittal of Request for Chemical Treatment Form;
 - v. Results to be expected from the treatment process including the predicted stormwater discharge characteristics;
 - vi. A statement, expressing sound engineering justification through the use of pilot plant data, results from similar installations, and/or scientific evidence that the proposed treatment is reasonably expected to meet the permit benchmarks; and
 - vii. Certification by a licensed professional engineer.
 - b. The engineering report shall be submitted no later than the May 15th prior to the Level 3 deadline, unless an alternate due date is specified in an order.
 - c. An Operation and Maintenance Manual (O&M Manual) shall be submitted to Ecology no later than 30 days after construction/installation is complete; unless an alternate due date is specified in an order.

4. Summarize the Level 3 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B). Include information on how monitoring, assessment or evaluation information was (or will be) used to determine whether existing treatment BMPs will be modified/enhanced, or if new/additional treatment BMPs will be installed.
5. **Level 3 Deadline:** The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable *Stormwater Management Manual* as soon as possible, but no later than September 30th the following year.
 - a. If installation of necessary *Treatment BMPs* is not feasible by the Level 3 Deadline; *Ecology* may approve additional time by approving a *Modification of Permit Coverage*.
 - b. If installation of *Treatment BMPs* is not feasible or not necessary to prevent discharges that may cause or contribute to violation of a water quality standard, *Ecology* may waive the requirement for *Treatment BMPs* by approving a *Modification of Permit Coverage*.
 - c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to *Ecology* in accordance with Condition S2.B, by May 15th prior to the Level 3 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *Modification of Coverage* request.
 - d. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.
 - e. For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

S9. REPORTING AND RECORDKEEPING

A. Discharge Monitoring Reports

1. The Permittee shall submit sampling data obtained during each reporting period on a Discharge Monitoring Report (DMR) or a Solids Monitoring Form (SMR)⁸ form provided, or otherwise approved, by *Ecology*.
2. Upon permit coverage, the Permittee shall ensure that DMRs are submitted to *Ecology* by the DMR Due Dates below:

Table 9: Reporting Dates and DMR Due Dates

| Reporting Period | Months | DMR Due Date |
|------------------|------------------|--------------|
| 1 st | January-March | May 15 |
| 2 nd | April-June | August 15 |
| 3 rd | July-Sept | November 15 |
| 4 th | October-December | February 15 |

⁸ SMR required if Condition S6.C.2 applies.

S9.A.3

3. DMRs and SMRs shall be submitted electronically using *Ecology's* Water Quality Permitting Portal – Discharge Monitoring Report (DMR) application, unless a waiver from electronic reporting has been granted (e.g., if a Permittee does not have broadband internet access). SMR forms, identified as a single sample DMR type, are included with the quarterly DMR forms on the Portal. If a waiver has been granted, reports must be postmarked or delivered to the following address by the due date:

Department of Ecology
Water Quality Program – Industrial Stormwater
PO Box 47696
Olympia, WA 98504-7696

4. The Permittee shall submit a DMR each reporting period, whether or not the *facility* has discharged *stormwater* from the site. For Permittees that receive permit coverage after January 2, 2015, the first reporting period is the first full quarter following the effective date of permit coverage.
 - a. If no *stormwater* sample was obtained from the site during a given reporting period, the Permittee shall submit the DMR form indicating “no sample obtained”, or “no discharge during the quarter”, as applicable.
 - b. If a Permittee has suspended sampling for a parameter due to consistent attainment, the Permittee shall submit a DMR and indicate that it has achieved Consistent Attainment for that parameter(s).
5. The Permittee must use the Water Quality Permitting Portal – Permit Submittals application (unless otherwise specified in the permit) to submit all other written permit-required reports by the date specified in the permit unless a waiver has been granted under S9.A. If a waiver has been granted, DMRs must be postmarked or delivered to the address listed in S9.A.3 by the due date.

B. Annual Reports

1. The Permittee shall submit a complete and accurate Annual Report to the Department of *Ecology* no later than May 15th of each year using *Ecology's* Water Quality Permitting Portal – Permit Submittals application, unless a waiver from electronic reporting has been granted according to S9.A.3. Annual Reports are not required if the Permittee didn't have permit coverage during the previous calendar year.
2. The annual report shall include corrective action documentation as required in S8.B-D. If corrective action is not yet completed at the time of submission of this annual report, the Permittee must describe the status of any outstanding corrective action(s).
3. Permittees shall include the following information with each annual report. The Permittee shall:
 - a. Identify the condition triggering the need for corrective action review.
 - b. Describe the problem(s) and identify the dates they were discovered.
 - c. Summarize any Level 1, 2 or 3 corrective actions completed during the previous calendar year and include the dates it completed the corrective actions.

- d. Describe the status of any Level 2 or 3 corrective actions triggered during the previous calendar year, and identify the date it expects to complete corrective actions.
 - e. Primary airport Permittees with at least 1,000 annual jet departures shall include a certification statement in each annual report that it does not use *airfield deicing* products that contain urea. Alternatively, Permittees shall meet the numeric effluent limit for ammonia in Condition S5.C. Table 5.
4. Permittees shall retain a copy of all annual reports onsite for *Ecology* review.

C. Records Retention

1. The Permittee shall retain the following documents onsite for a minimum of five years:
 - a. A copy of this permit.
 - b. A copy of the permit coverage letter.
 - c. Records of all sampling information specified in Condition S4.B.3.
 - d. Inspection reports including documentation specified in Condition S7.
 - e. Any other documentation of compliance with permit requirements.
 - f. All equipment calibration records.
 - g. All BMP maintenance records.
 - h. All original recordings for continuous sampling instrumentation.
 - i. Copies of all laboratory reports as described in Condition S3.B.4.
 - j. Copies of all reports required by this permit.
 - k. Records of all data used to complete the *application* for this permit.
2. The Permittee shall extend the period of records retention during the course of any unresolved litigation regarding the *discharge of pollutants* by the Permittee, or when requested by *Ecology*.
3. The Permittee shall make all plans, documents and records required by this permit immediately available to *Ecology* or the local jurisdiction upon request; or within 14 days of a written request from *Ecology*.

D. Additional Sampling by the Permittee

If the Permittee samples any *pollutant* at a designated sampling point more frequently than required by this permit, then the Permittee shall include the results in the calculation and reporting of the data submitted in the Permittee's DMR.

If Permittees collect more than one sample during a 24-hour period, they must first calculate the *daily average* of the individual grab sample results collected during that 24-hour period; then use the *daily average* to calculate a quarterly average.

E. Reporting Permit Violations

1. In the event the Permittee is unable to comply with any of the terms and conditions of this permit which may endanger human health or the environment, or exceed any numeric effluent limitation in the permit, the Permittee shall, upon becoming aware of the circumstances:
 - a. Immediately take action to minimize potential *pollution* or otherwise stop the noncompliance and correct the problem.
 - b. Immediately notify the appropriate *Ecology* regional office of the failure to comply:
 - Central Region at (509) 575-2490 for Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, or Yakima County.
 - Eastern Region at (509) 329-3400 for Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, or Whitman County.
 - Northwest Region at (425) 649-7000 for Island, King, Kitsap, San Juan, Skagit, Snohomish, or Whatcom County.
 - Southwest Region at (360) 407-6300 for Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, or Wahkiakum County.
 - c. Submit a detailed written report to *Ecology* within 5 days of the time the Permittee becomes aware of the circumstances unless *Ecology* requests an earlier submission. The report shall be submitted using *Ecology*'s Water Quality Permitting Portal – Permit Submittals application, unless a waiver from electronic reporting has been granted according to S9.A.3. The Permittee's report shall contain:
 - i. A description of the noncompliance, including exact dates and times.
 - ii. Whether the noncompliance has been corrected and, if not, when the noncompliance will be corrected.
 - iii. The steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - d. Upon request of the Permittee, Ecology may waive the requirement for a written report on a case-by-case basis, if the immediate notification (S9.E.1.b) is received by Ecology within 24 hours.
2. Compliance with the requirements of this section does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Public Access to SWPPP

The Permittee shall provide access to, or a copy of, the SWPPP to the public when requested in writing. Upon receiving a written request from the public for the SWPPP, the Permittee shall:

1. Provide a copy of the SWPPP to the requestor within 14 days of receipt of the written request; or
2. Notify the requestor within ten days of receipt of the written request of the location and times within normal business hours when the requestor may view the SWPPP, and provide access to the SWPPP within 14 days of receipt of the written request; or
3. Provide a copy of the plans and records to *Ecology*, where the requestor may view the records, within 14 days of a request; or may arrange with the requestor for an alternative, mutually agreed upon location for viewing and/or copying of the plans and records. If access to the plans and records is provided at a location other than at an *Ecology* office, the Permittee will provide reasonable access to copying services for which it may charge a reasonable fee.

S10. COMPLIANCE WITH STANDARDS

- A. Discharges shall not cause or contribute to a violation of *Surface Water Quality Standards* (Chapter 173-201A WAC), *Ground Water Quality Standards* (Chapter 173-200 WAC), *Sediment Management Standards* (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR 131.36). Discharges that are not in compliance with these standards are prohibited.
- B. *Ecology* will presume compliance with *water quality standards*, unless *discharge* monitoring data or other site specific information demonstrates that a discharge causes or contributes to violation of *water quality standards*, when the Permittee is:
 1. In full compliance with all permit conditions, including planning, sampling, monitoring, reporting, and recordkeeping conditions.
 2. Fully implementing storm water *best management practices* contained in storm water technical manuals approved by the department, or practices that are *demonstrably equivalent* to practices contained in storm water technical manuals approved by *Ecology*, including the proper selection, implementation, and maintenance of all applicable and appropriate *best management practices* for on-site *pollution* control.
- C. Prior to the *discharge* of *stormwater* and non-stormwater to *waters of the state*, the Permittee shall apply all known and reasonable methods of prevention, control, and treatment (*AKART*). To comply with this condition, the Permittee shall prepare and implement an adequate SWPPP, with all applicable and appropriate BMPs, including the BMPs necessary to meet the standards identified in Condition S10.A, and shall install and maintain the BMPs in accordance with the SWPPP, applicable SWMMs, and the terms and conditions of this permit.

S11. PERMIT FEES

- A. The Permittee shall pay permit fees assessed by *Ecology* and established in Chapter 173-224 WAC.
- B. *Ecology* will continue to assess permit fees until it terminates a permit in accordance with Special Condition S13 or revoked in accordance with General Condition G5.

S12. SOLID AND LIQUID WASTE MANAGEMENT

The Permittee shall not allow solid waste material or *leachate* to cause violations of the State Surface *Water Quality Standards* (Chapter 173-201A WAC), the *Ground Water Quality Standards* (Chapter 173-200 WAC) or the Sediment Management Standards (Chapter 173-204 WAC).

S13. NOTICE OF TERMINATION (NOT)

A. Conditions for a NOT

Ecology may approve a *Notice of Termination* (NOT) request when the Permittee meets one or more of the following conditions:

1. All permitted *stormwater* discharges associated with *industrial activity* that are authorized by this permit cease because the *industrial activity* has ceased, and no *significant materials* or *industrial pollutants* remain exposed to *stormwater*.
2. The party that is responsible for permit coverage (signatory to *application*) sells or otherwise legally transfers responsibility for the *industrial activity*.
3. All *stormwater* discharges associated with *industrial activity* are prevented because the *stormwater* is redirected to a *sanitary sewer*, or discharged to ground (e.g., infiltration).

B. Procedure for Obtaining Termination

1. The Permittee shall apply for a NOT on a form specified by *Ecology* (NOT Form).
2. The Permittee seeking permit coverage termination shall sign the NOT in accordance with Condition G2. of this permit.
3. The Permittee shall submit the completed NOT form to *Ecology* at the address in Condition S9.A.5.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this *general permit* shall be consistent with the terms and conditions of this *general permit*. Any *discharge* of any *pollutant* more frequently than, or at a level in excess of that identified and authorized by the *general permit*, shall constitute a violation of the terms and conditions of this permit.

G2. SIGNATORY REQUIREMENTS

A. All permit *applications* shall be signed:

1. In the case of corporations, by a *responsible corporate officer*.
2. In the case of a partnership, by a general partner of a partnership.
3. In the case of sole proprietorship, by the proprietor.
4. In the case of a municipal, state, or other public *facility*, by either a principal executive officer or ranking elected official.

B. All reports required by this permit and other information requested by *Ecology* shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the *Ecology*.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated *facility*, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

C. Changes to authorization. If an authorization under paragraph G2.B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the *facility*, a new authorization satisfying the requirements of paragraph G2.B.2 above shall be submitted to *Ecology* prior to, or together with, any reports, information, or *applications* to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that *qualified personnel* properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G3. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of *Ecology*, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a *discharge* is located or where any records shall be kept under the terms and conditions of this permit.
- B. To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
- C. To inspect, at reasonable times, any facilities, equipment (including sampling and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the *Clean Water Act*.

G4. GENERAL PERMIT MODIFICATION AND REVOCATION

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of Chapter 173-226 WAC. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, the following:

- A. When a change which occurs in the technology or practices for control or abatement of *pollutants* applicable to the category of *dischargers* covered under this permit.
- B. When effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of *dischargers* covered under this permit.
- C. When a water quality management plan containing requirements applicable to the category of *dischargers* covered under this permit is approved.
- D. When information is obtained which indicates that cumulative effects on the environment from *dischargers* covered under this permit are unacceptable.

G5. REVOCATION OF COVERAGE UNDER THE PERMIT

- A. Pursuant with Chapter 43.21B RCW and Chapter 173-226 WAC, *Ecology* may terminate coverage for any *discharger* under this permit for cause. Cases where coverage may be terminated include, but are not limited to, the following:
 - 1. Violation of any term or condition of this permit.
 - 2. Obtaining coverage under this permit by misrepresentation or failure to disclose fully all relevant facts.
 - 3. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
 - 4. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

5. A determination that the permitted activity endangers human health or the environment, or contributes to *water quality standards* violations.
 6. Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.
 7. Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable.
- B. *Ecology* may require any *discharger* under this permit to apply for and obtain coverage under an individual permit or another more specific *general permit*.
- C. Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within 90 days from the time of revocation and is submitted along with a complete individual permit *application* form.

G6. REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new *application*, or a supplement to the previous *application*, whenever a material change to the *industrial activity* or in the quantity or type of *discharge* is anticipated which is not specifically authorized by this permit. This *application* shall be submitted at least 60 days prior to any proposed changes. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G8. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the expiration date of this permit.

G9. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other *pollutants* removed in the course of treatment or control of *stormwater* shall not be resuspended or reintroduced to the final effluent stream for *discharge* to state waters.

G10. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to *Ecology*, within a reasonable time, all information which *Ecology* may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The

Permittee shall also submit to *Ecology*, upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

G11.OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G12.ADDITIONAL SAMPLING

Ecology may establish specific sampling requirements in addition to those contained in this permit by administrative order or permit modification.

G13.PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to \$10,000 and costs of prosecution, or by imprisonment at the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of this permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to \$10,000 for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G14.UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted *facility* was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S9.E; and 4) the Permittee complied with any remedial measures required under this permit.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G15.PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G16.DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the *Clean Water Act* and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G17.TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the *Clean Water Act* for toxic *pollutants* within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G18.PENALTIES FOR TAMPERING

The *Clean Water Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate any sampling device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than \$20,000 per day of violation, or imprisonment of not more than four years, or both.

G19.REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, give notice to *Ecology* of planned physical alterations, modifications or additions to the permitted *industrial activity*, which will result in:

- A. The permitted *facility* being determined to be a new source pursuant to 40 CFR 122.29(b).
- B. A *significant process change*, as defined in the glossary of this permit.
- C. A change in the location of *industrial activity* that affects the Permittee's sampling requirements in Conditions S3, S4, S5, and S6.

Following such notice, permit coverage may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any *pollutants* not previously limited. Until such modification is effective, any new or increased *discharge* in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G20.REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit *application*, or submitted incorrect information in a permit *application* or in any report to *Ecology*, it shall promptly submit such facts or information.

G21.REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to *Ecology* by submission of a new *application*, or supplement to the existing *application*, at least 45 days prior to commencement of such discharges, of any *facility* expansions, production increases, or other planned changes, such as process modifications, in the permitted *facility* or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by *Ecology*.

G22.REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT

- A. Any *discharger* authorized by this permit may request to be excluded from coverage under the *general permit* by applying for an individual permit.
- B. The *discharger* shall submit to *Ecology* an application as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons shall fully document how an individual permit will apply to the applicant in a way that the *general permit* cannot.
- C. *Ecology* may make specific requests for information to support the request. *Ecology* shall either issue an individual permit or deny the request with a statement explaining the reason for the denial.
- D. When an individual permit is issued to a *discharger* otherwise subject to the industrial *stormwater general permit*, the applicability of the industrial *stormwater general permit* to that Permittee is automatically terminated on the effective date of the individual permit.

G23.APPEALS

- A. The terms and conditions of this *general permit*, as they apply to the appropriate class of *dischargers*, are subject to appeal by any person within 30 days of issuance of this *general permit*, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- B. The terms and conditions of this *general permit*, as they apply to an individual *discharger*, are appealable in accordance with Chapter 43.21B RCW within 30 days of the effective date of coverage of that *discharger*. Consideration of an appeal of *general permit* coverage of an individual *discharger* is limited to the *general permit's* applicability or nonapplicability to that individual *discharger*.

- C. The appeal of *general permit* coverage of an individual *discharger* does not affect any other *dischargers* covered under this *general permit*. If the terms and conditions of this *general permit* are found to be inapplicable to any individual *discharger(s)*, the matter shall be remanded to *Ecology* for consideration of issuance of an individual permit or permits.

G24.SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or *application* of any provision of this permit to any circumstance, is held invalid, the *application* of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

G25.BYPASS PROHIBITED

Bypass, which is the intentional diversion of waste streams from any portion of a treatment *facility*, is prohibited, and *Ecology* may take enforcement action against a Permittee for *bypass* unless one of the following circumstances (A, B, or C) is applicable.

A. *Bypass* for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by *Ecology* prior to the *bypass*. The Permittee must submit prior notice, if possible, at least ten days before the date of the *bypass*.

B. *Bypass* Which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit

This *bypass* is permitted only if:

1. *Bypass* is unavoidable to prevent loss of life, personal injury, or *severe property damage*. “*Severe property damage*” means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a *bypass*.
2. There are no feasible alternatives to the *bypass*, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a *bypass* which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment *facility*.
3. *Ecology* is properly notified of the *bypass* as required in condition S9E of this permit.

C. *Bypass* which is Anticipated and has the Potential to Result in Noncompliance of this Permit

The Permittee must notify *Ecology* at least thirty days before the planned date of *bypass*. The notice must contain (1) a description of the *bypass* and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of *bypass* under each alternative; (5) a recommendation as to the preferred alternative for conducting the *bypass*; (6) the projected date of *bypass* initiation; (7) a statement of compliance with SEPA; (8) a request for modification of *water quality standards* as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the *bypass*.

For probable construction bypasses, the need to *bypass* is to be identified as early in the planning process as possible. The analysis required above must be considered during preparation of the engineering report or facilities plan and plans and specifications and must be included to the extent practical. In cases where the probable need to *bypass* is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the *bypass*.

Ecology will consider the following prior to issuing an administrative order for this type *bypass*:

1. If the *bypass* is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
2. If there are feasible alternatives to *bypass*, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment *facility*.
3. If the *bypass* is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed *bypass* and any other relevant factors, *Ecology* will approve or deny the request. The public must be notified and given an opportunity to comment on *bypass* incidents of significant duration, to the extent feasible. Approval of a request to *bypass* will be by administrative order issued by *Ecology* under RCW 90.48.120.

APPENDIX 1 - ACRONYMS

| | |
|--------|--|
| AKART | All Known, Available and Reasonable methods of prevention, control and Treatment |
| BMP | Best Management Practice |
| CAS | Chemical Abstract Service |
| CERCLA | Comprehensive Environmental Response Compensation & Liability Act |
| CFR | Code of Federal Regulations |
| CWA | Clean Water Act |
| CWT | Centralized Waste Treatment |
| EPA | Environmental Protection Agency |
| ESC | Erosion and Sediment Control |
| FAA | Federal Aviation Administration |
| FWPCA | Federal Water Pollution Control Act |
| NOT | Notice of Termination |
| NPDES | National Pollutant Discharge Elimination System |
| RCRA | Resource Conservation and Recovery Act |
| RCW | Revised Code of Washington |
| SARA | Superfund Amendment and Reauthorization Act |
| SEPA | State Environmental Policy Act |
| SIC | Standard Industrial Classification |
| SMCRA | Surface Mining Control and Reclamation Act |
| SWMM | Stormwater Management Manual |
| SWPPP | Stormwater Pollution Prevention Plan |
| TMDL | Total Maximum Daily Load |
| USC | United States Code |
| USEPA | United States Environmental Protection Agency |
| WAC | Washington Administrative Code |
| WQ | Water Quality |

APPENDIX 2 - DEFINITIONS

40 CFR means Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

303(d)-listed water body means waterbodies as listed as Category 5 on Washington State's Water Quality Assessment.

Air Emission means a release of air contaminants into the ambient air.

Airfield Pavement means all paved surfaces on the *airside* of an airport.

Airside means the part of an airport directly involved in the arrival and departure of aircraft, including runways, taxiways, aprons, and ramps.

AKART is an acronym for "all known, available, and reasonable methods of prevention, control, and treatment." AKART represents the most current methodology that can be reasonably required for preventing, controlling, or abating the *pollutants* and controlling *pollution* associated with a discharge.

Annual Non-propeller Aircraft Departures means the average number of commercial turbine-engine aircraft that are propelled by jet, i.e., turbojet or turbofan, that take off from an airport on an annual basis, as tabulated by the Federal Aviation Administration (FAA).

Applicable TMDL means a *TMDL* which has been completed either before the issuance date of this permit or the date the Permittee first obtains coverage under this permit, whichever is later.

Application means a request for coverage under this *general permit* pursuant to WAC 173-226-200. Also called a *Notice of Intent (NOI)*.

Average means arithmetic mean, which is equal to the sum of the measurements divided by the number of measurements.

Best Management Practices (BMPs - general definition) means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the *pollution* of *waters of the state*. BMPs include treatment systems, operating procedures, and practices to control: facility site *runoff*, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In this permit BMPs are further categorized as operational source control, structural source control, *erosion* and *sediment* control, and *treatment BMPs*.

Benchmark means a *pollutant* concentration used as a permit threshold, below which a pollutant is considered unlikely to cause a water quality violation, and above which it may. When pollutant concentrations exceed benchmarks, corrective action requirements take effect. Benchmark values are not *water quality standards* and are not numeric effluent limitations; they are indicator values.

Bypass means the intentional diversion of waste streams from any portion of a treatment *facility*.

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a *sanitary sewer* and a *storm sewer*, and into which inflow is allowed by local ordinance.

Construction Activity means clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, industrial buildings, and demolition activity.

Control Plan means a *total maximum daily load (TMDL)* determination, restrictions for the protection of state or federal threatened or endangered species, a *ground water* management plan, or other limitations that regulate or set limits on discharges to a specific waterbody or *ground water* recharge area.

Daily Average means the average measurement of the pollutant throughout a period of 24 consecutive hours starting at 12:01 A.M. and ending at the following 12:00 P.M. (midnight).

Deicing means procedures and practices to remove or prevent any accumulation of snow or ice on: 1) an aircraft; or 2) *airfield* pavement.

Demonstrably Equivalent means that the technical basis for the selection of all storm water *best management practices* are documented within a storm water *pollution* prevention plan. The storm water *pollution* prevention plan must document: 1) The method and reasons for choosing the storm water *best management practices* selected; 2) The *pollutant* removal performance expected from the practices selected; 3) The technical basis supporting the performance claims for the practices selected, including any available existing data concerning field performance of the practices selected; 4) An assessment of how the selected practices will comply with state *water quality standards*; and 5) An assessment of how the selected practices will satisfy both applicable federal technology-based treatment requirements and state requirements to use all known, available, and reasonable methods of prevention, control, and treatment.

Detention means the temporary storage of *stormwater* to improve quality and/or to reduce the mass flow rate of discharge.

Discharge [of a pollutant] means any addition of any *pollutant* or combination of pollutants to waters of the United States from any point source. This definition includes additions of pollutants into waters of the United States from: surface *runoff* which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, *municipality*, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Discharge point means the location where a discharge leaves the Permittee's facility. *Discharge point* also includes the location where a discharge enters the ground on-site (e.g., infiltration BMP).

Discharger means an owner or operator of any *facility* or activity subject to regulation under Chapter 90.48 RCW or the Federal *Clean Water Act*.

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such *ground water* infiltration or surface waters as may be present.

Ecology means the Washington State Department of *Ecology*.

EPA means the United States Environmental Protection Agency.

Equivalent BMPs means operational, source control, treatment, or innovative BMPs which result in equal or better quality of *stormwater discharge* to surface water or to *ground water* than BMPs selected from the SWMM.

Erosion means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

Erosion and Sediment Control BMPs means BMPs that are intended to prevent *erosion* and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, and *sediment* traps and ponds.

Existing Facility means a *facility* that was in operation prior to the effective date of this permit. It also includes any *facility* that is not categorically included for coverage but is in operation when identified by *Ecology* as a *significant contributor of pollutants*.

Facility means any source (including land or appurtenances thereto) that is subject to regulation under this permit. See Special Condition S1.

First fall storm event means the first time on or after October 1st of each year that precipitation occurs and results in a *stormwater discharge* from a *facility*. This storm event tends to wash off and discharge pollutants that accumulate during the preceding dry months.

General Permit means a permit which covers multiple *dischargers* of a point source category within a designated geographical area, in lieu of individual permits being issued to each *discharger*.

Ground Water means water in a saturated zone or stratum beneath the land surface or a surface waterbody.

Illicit Discharge means any *discharge* that is not composed entirely of *stormwater* except (1) discharges authorized pursuant to a separate NPDES permit, or (2) conditionally authorized non-*stormwater* discharges identified in Condition S5.D.

Inactive Facility means a *facility* that no longer engages in business, production, providing services, or any auxiliary operation.

Industrial Activity means (1) the 10 categories of industrial activities identified in 40 CFR 122.26(b)(14)(i-ix and xi), (2) any *facility* conducting any activities described in Table 1, or (3) any *facility* identified by *Ecology* as a *significant contributor of pollutants*.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a *land application site*, surface impoundment, injection well, or waste pile.

Land Application Site means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

Leachate means water or other liquid that has percolated through raw material, product or waste and contains substances in solution or suspension as a result of the contact with these materials.

Local Government means any county, city, or town having its own government for local affairs.

Material Handling means storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product, or waste product.

Municipality means a political unit such as a city, town, or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal *Clean Water Act*, for the *discharge of pollutants to surface waters of the state* from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of *Ecology*.

New Development means land disturbing activities, including Class IV -general forest practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of impervious surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development.

New Discharge(r) means a *facility* from which there is a discharge, that did not commence the *discharge* at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.

New Facility means a *facility* that begins activities that result in a *discharge* or a potential discharge to *waters of the state* on or after the effective date of this *general permit*.

Noncontact Cooling Water means water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

Notice of Termination (NOT) means a request for termination of coverage under this *general permit* as specified by Special Condition S13 of this permit.

Operational Source Control BMPs means schedule of activities, prohibition of practices, maintenance procedures, employee training, good housekeeping, and other managerial practices to prevent or reduce the *pollution of waters of the state*. Not included are BMPs that require construction of *pollution* control devices.

Outfall means the point where a discharge from a facility enters a receiving waterbody or receiving waters.

Pollutant means the *discharge* of any of the following to *waters of the state*: dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of section 312 of the FWPCA nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the FWPCA.

Pollution means contamination or other alteration of the physical, chemical, or biological properties of *waters of the state*; including change in temperature, taste, color, *turbidity*, or odor of the waters; or such *discharge* of any liquid, gaseous, solid, radioactive or other substance into any *waters of the state* as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish, or other aquatic life.

Process Wastewater means any non-stormwater which, during manufacturing or processing, comes into direct contact or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. If stormwater commingles with process wastewater, the commingled water is considered process wastewater.

Puget Sound Sediment Cleanup Site means: Category 4B (Sediment) portions of Budd Inlet (Inner), Commencement Bay (Inner), Commencement Bay (Outer), Dalco Passage and East Passage, Duwamish Waterway (including East and West Waterway), Eagle Harbor, Elliot Bay, Hood Canal (North), Liberty Bay, Rosario Strait, Sinclair Inlet, and Thea Foss Waterway; Category 5 (Sediment) portions of the Duwamish Waterway (including East and West Waterway), and Port Gardner and Inner Everett Harbor; and Port Angeles Harbor sediment cleanup area, as mapped on Ecology's ISGP website. All references to Category 4B and 5 pertain to the 2012 EPA-approved Water Quality Assessment.

Qualified Industrial Stormwater Professional means a licensed professional engineer, geologist, hydrogeologist; Certified Professional in Stormwater Quality, Certified Professional in Erosion and Sediment Control; or qualified environmental consultant with education and experience in stormwater management and licensed to do business in the State of Washington.

Qualified Personnel means those who possess the knowledge and skills to assess conditions and activities that could impact *stormwater* quality at the *facility*, and evaluate the effectiveness of *best management practices* required by this permit.

Quantitation Level (QL) also known as Minimum Level of Quantitation (ML) means the lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that all method-specified sample weights, volumes, and cleanup procedures have been employed.

Reasonable Potential means the likely probability for *pollutants* in the *discharge* to exceed the applicable water quality criteria in the receiving waterbody.

Redevelopment means on a site that is already substantially developed (i.e., has 35% or more of existing impervious surface coverage), the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities.

Regular Business Hours means those time frames when the *facility* is engaged in its primary production process, but does not include additional shifts or weekends when partial staffing is at the site primarily for maintenance and incidental production activities. *Regular business hours* do not include periods of time that the *facility* is inactive and *unstaffed*.

Representative [sample] means a sample of the *discharge* that accurately characterizes *stormwater runoff* generated in the designated drainage area of the *facility*.

Responsible Corporate Officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Runoff means that portion of rainfall or snowmelt water not absorbed into the ground that becomes surface flow.

Sanitary Sewer means a sewer which is designed to convey *domestic wastewater*.

Sediment means the fragmented material that originates from the weathering and *erosion* of rocks, unconsolidated deposits, or unpaved yards, and is transported by, suspended in, or deposited by water.

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a *bypass*. *Severe property damage* does not mean economic loss caused by delays in production.

Significant Amount means an amount of a *pollutant* in a *discharge* that is amenable to *AKART*; or an amount of a *pollutant* that has a *reasonable potential* to cause a violation of surface or *ground water quality standards* or *sediment management standards*.

Significant Contributor of Pollutant(s) means a *facility* determined by *Ecology* to be a contributor of a *significant amount(s)* of a *pollutant(s)* to *waters of the state*.

Significant Materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the *facility* is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with *stormwater* discharges.

Significant Process Change means any modification of the *facility* that would result in any of the following:

1. Add different *pollutants* in a *significant amount* to the discharge.
2. Increase the *pollutants* in the *stormwater discharge* by a *significant amount*.
3. Add a new *industrial activity* (SIC) that was not previously covered.
4. Add additional impervious surface or acreage such that *stormwater* discharge would be increased by 25% or more.

Source Control BMPs means structures or operations that are intended to prevent pollutants from coming into contact with stormwater through physical separation of areas or careful management of activities that are sources of pollutants. This permit separates source control into two types: *structural source control BMPs* and *operational source control BMPs*.

Standard Industrial Classification (SIC) is the statistical classification standard underlying all establishment-based federal economic statistics classified by industry as reported in the 1987 SIC Manual by the Office of Management and Budget.

State Environmental Policy Act (SEPA) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

Storm Sewer means a sewer that is specifically designed to carry *stormwater*. Also called a storm drain.

Stormwater means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a *stormwater drainage system* into a defined surface waterbody, or a constructed infiltration facility.

Stormwater Discharge Associated with Industrial Activity means the *discharge* from any conveyance that is used for collecting and conveying *stormwater* and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant (see 40 CFR 122(b)(14)).

Stormwater Drainage System means constructed and natural features which function together as a system to collect, convey, channel, hold, inhibit, retain, detain, infiltrate or divert *stormwater*.

Stormwater Management Manual (SWMM) or Manual means the technical manuals prepared by Ecology for *stormwater* management in western and eastern Washington.

Stormwater Pollution Prevention Plan (SWPPP) means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of *stormwater*.

Structural Source Control BMPs means physical, structural, or mechanical devices or facilities that are intended to prevent *pollutants* from entering *stormwater*.

Substantially Identical Discharge Point means a discharge point that shares the following characteristics with another discharge point: 1) the same general industrial activities conducted in the drainage area of the *discharge point*, 2) the same *Best Management Practices* conducted in the drainage area of the *discharge point*, 3) the same type of exposed materials located in the drainage area of the *discharge point* that are likely to be significant contributors of *pollutants* to *stormwater discharges*, and 4) the same type of impervious surfaces in the drainage area that could affect the percolation of *stormwater runoff* into the ground (e.g., asphalt, crushed rock, grass).

Surface Waters of the State includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state.

Total Maximum Daily Load (TMDL) means a calculation of the maximum amount of a *pollutant* that a waterbody can receive and still meet state *water quality standards*. Percentages of the *total maximum daily load* are allocated to the various *pollutant* sources. A *TMDL* is the sum of the allowable loads of a single *pollutant* from all contributing point and nonpoint sources. The *TMDL* calculations include a "margin of safety" to ensure that the waterbody can be protected in

case there are unforeseen events or unknown sources of the *pollutant*. The calculation also accounts for seasonable variation in water quality.

Treatment BMPs means BMPs that are intended to remove *pollutants* from *stormwater*.

Turbidity means the clarity of water expressed as nephelometric *turbidity* units (NTU) and measured with a calibrated turbidimeter.

Underground Injection Control Well means a well that is used to *discharge* fluids into the subsurface. An *underground injection control well* is one of the following:

1. A bored, drilled, or driven shaft,
2. An improved sinkhole, or
3. A subsurface fluid distribution system. (WAC 173-218-030)

Unstaffed means the *facility* has no assigned staff. A site may be “*unstaffed*” even when security personnel are present, provided that *pollutant* generating activities are not included in their duties.

Vehicle means a motor-driven conveyance that transports people or freight, such as an automobile, truck, train, or airplane.

Vehicle Maintenance means the rehabilitation, mechanical repairing, painting, fueling, and/or lubricating of a motor-driven conveyance that transports people or freight, such as an automobile, truck, train, or airplane.

Wasteload Allocation (WLA) means the portion of a receiving water’s loading capacity that is allocated to one of its existing or future point sources of *pollution*. WLAs constitute a type of water quality based effluent limitation (40 CFR 130.2(h)).

Water Quality Standards means the Water Quality Standards for *Surface Waters of the State* of Washington, Chapter 173-201A WAC, Ground Water Quality Standards (Chapter 173-200 WAC), Sediment Management Standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR 131.36).

Waters of the State includes those waters defined as “waters of the United States” in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State. State statute defines “*waters of the state*” to include lakes, rivers, ponds, streams, wetlands, inland waters, *underground waters*, salt waters and all other surface waters and water courses within the jurisdiction of the state of Washington (Chapter 90.48 RCW).

APPENDIX 3 - SWPPP CERTIFICATION FORM

The Permittee shall use this form to sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S3 and S8 of the Industrial Stormwater General Permit.

- A SWPPP certification form needs to be completed and attached to all SWPPPs.
- Each time a Level 1, 2, or 3 Corrective Action is required, this form needs to be re-signed and re-certified by the Permittee, and attached to the SWPPP.

Is this SWPPP certification in response to a Level 1, 2 or 3 Corrective Action? ☐ Yes ☐ No

If Yes: Type of Corrective Action?: ☐ Level 1 ☐ Level 2 ☐ Level 3*

Date SWPPP update/revision completed:

Briefly describe SWPPP Update (use backside, if necessary):

***Note:** For Level 3 Corrective Actions, a *Qualified Industrial Stormwater Professional* must review the revised SWPPP, and sign and certify below, in accordance with Condition S8.D.2.:
"The Permittee has made appropriate revisions to the SWPPP to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. Based on my review of the SWPPP, discharges from the facility are reasonably expected to meet the ISGP benchmarks upon implementation."

Qualified Industrial Stormwater Professional's Printed Name

Title

Qualified Industrial Stormwater Professional's Signature

Date

"I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Operator's Printed Name *

Title

Operator's Signature *

Date

* Federal regulations require this document to be signed in accordance with Condition G2.

APPENDIX 4 - EXISTING DISCHARGERS TO IMPAIRED WATERS

This appendix has a link below to a website list of existing Permittees that *discharge pollutants* of concern, either directly or indirectly through a stormwater drainage system, to an *outfall* that enters 303(d)-listed (Category 5) impaired waters based on the 2012 EPA-approved water quality assessment and to *Puget Sound Sediment Cleanup Sites*.

<http://www.ecy.wa.gov/programs/wq/stormwater/industrial/permitdocs/iswgpapp4.pdf>

Appendix 4 is based upon information in Ecology's PARIS database. As such, it is subject to revision based upon new information including but not limited to: new facilities, *discharge points*, and/or *outfalls*; updates or corrections to ISGP facility locations, stormwater sample points, *discharge points*, and/or *outfalls*.

Appendix 4 is a technical assistance tool intended to support ISGP facilities with permit compliance. Appendix 4 may contain errors or omissions for various reasons, but this does not relieve ISGP facilities of applicable permit requirements. If an inconsistency exists between Appendix 4 and ISGP Condition S6, the ISGP takes precedence. Permittees aware of errors or omissions with the information contained in Appendix 4 shall contact Ecology so that an update/correction can be made. If changes or updates are made, based on new or more accurate information, *Ecology* will notify the affected Permittees directly. Such changes or updates will not become effective until 30 days after the affected *dischargers* are notified.

APPENDIX 5 - DISCHARGERS SUBJECT TO TMDL REQUIREMENTS

The list of *dischargers* identified as discharging to water bodies which have completed water quality cleanup plans or *TMDLs* and associated monitoring requirements can be viewed on *Ecology's* website at:

<http://www.ecy.wa.gov/programs/wq/stormwater/industrial/permitdocs/iswgpapp5.pdf>

The most current list can also be obtained by contacting Ecology at:

Industrial Stormwater General Permit
Washington State Department of Ecology
PO Box 47696
Olympia, WA 98504-7696

This list is based on the best information available to *Ecology*. There will be changes and updates to this list based on new, more accurate information. If changes or updates are made, *Ecology* will notify the affected Permittees directly. Such changes or updates will not become effective until 30 days after the affected *dischargers* are notified.

APPENDIX C. BLANK SWPPP FORMS

INDUSTRIAL STORMWATER MONTHLY INSPECTION REPORT

Inspections must be conducted by a person with the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and evaluate the effectiveness of best management practices required by this permit. Retain a copy of the completed and signed form in accordance with Permit Condition S9.C.

| | | | | | |
|--|--|------------------|-----|-------|--|
| FACILITY NAME: | | INSPECTION TIME: | | DATE: | |
| WEATHER INFORMATION: <ul style="list-style-type: none"> Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.): <hr/> <hr/> <ul style="list-style-type: none"> Was stormwater (e.g., runoff from rain or snowmelt) flowing at outfalls and/or discharge areas shown on the Site Map during the inspection: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Comments: <hr/> <hr/> | | | | | |
| I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION | | | | | |
| SWPPP and Site Map: Have a copy of the SWPPP and site map with you during the inspection so that you can ensure they are current and accurate. Use it as an aide in recording the location of any issues you identify during the inspection. <ul style="list-style-type: none"> Is the Site Map current and accurate? Is the SWPPP inventory of activities, materials and products current? Any new potential pollutant sources must be added to the map and reflected in the <i>SWPPP Facility Assessment & Tables 2, 2A, 3 and 5</i> . | | | Yes | No | Findings and Remedial Action Documentation: Describe any findings below and the schedule for remedial action completion including the date initiated and date completed or expected to be completed. |
| Vehicle/Equipment Areas: <i>Equipment cleaning: Check NA if not performed on-site. Skip section.</i> Is equipment washed and/or cleaned only in designated areas? <ul style="list-style-type: none"> Observe washing: Is all wash water captured and properly disposed of? <i>Equipment fueling: Check NA if not performed on-site. Skip section.</i> <ul style="list-style-type: none"> Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills? Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater? Are structures in place to prevent precipitation from accumulating in containment areas? <ul style="list-style-type: none"> If not, is there any water or other fluids accumulated within the containment area? Note: If containment areas are not covered to prevent water from accumulating, the SWPPP must include a plan describing how accumulated water will be managed and disposed of. | | | Yes | No | Findings and Remedial Action Documentation: |

| | | | | |
|--|------------|-----------|-----------|---|
| <p>Equipment maintenance:</p> <ul style="list-style-type: none"> • Are maintenance tools, equipment and materials stored under shelter, elevated and covered? • Are all drums and containers of fluids stored with proper cover and containment? • Are exteriors of containers kept outside free of deposits? • Are any vehicles and/or equipment leaking fluids? Identify leaking equipment. • Is there evidence of leaks or spills since last inspection? Identify and address. • Are materials, equipment, and activities located so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas)? <p>Add any additional site-specific BMPs:</p> <hr/> <hr/> <hr/> <hr/> | <p>Yes</p> | <p>No</p> | <p>NA</p> | <p>Findings and Remedial Action Documentation:</p> |
|--|------------|-----------|-----------|---|

| I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION | | | | |
|--|------------|-----------|-----------|---|
| <p>Good Housekeeping BMPs:</p> <p>1. Are paved surfaces free of accumulated dust/sediment and debris?</p> <ul style="list-style-type: none"> • Date of last quarterly vacuum/sweep _____ • Are there areas of erosion or sediment/dust sources that discharge to storm drains? <p>2. Are all waste receptacles located outdoors:</p> <ul style="list-style-type: none"> • In good condition? • Not leaking contaminants? • Closed when is not being accessed? • External surfaces and area free of excessive contaminant buildup? <p>3. Are the following areas free of accumulated dust/sediment, debris, contaminants, and/or spills/leaks of fluids?</p> <ul style="list-style-type: none"> • External dock areas • Pallet, bin, and drum storage areas • Maintenance shop(s) • Equipment staging areas (loaders, tractors, trailers, forklifts, etc) • Around bag-house(s) • Around bone yards • Other areas of industrial activity: <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> | <p>Yes</p> | <p>No</p> | <p>NA</p> | <p>Findings and Remedial Action Documentation:</p> |

| | | | | |
|--|-----|----|----|--|
| Spill Response and Equipment: Are spill kits available, in the following locations? <ul style="list-style-type: none"> • Fueling stations • Transfer and mobile fueling units • Vehicle and equipment maintenance areas Do the spill kits contain all the permit required items? <ul style="list-style-type: none"> • Oil absorbents capable of absorbing 15 gallons of fuel. • A storm drain plug or cover kit. • A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity. • A non-metallic shovel. • Two five-gallon buckets with lids. Are contaminated absorbent materials properly disposed of? | Yes | No | NA | Findings and Remedial Action Documentation: |
| I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION | | | | |
| General Material Storage Areas: <ul style="list-style-type: none"> • Are damaged materials stored inside a building or another type of storm resistance shelter? • Are all uncontained material piles stored in a manner that does not allow discharge of impacted stormwater? • Are scrap metal bins covered? • Are outdoor containers covered? | Yes | No | NA | Findings and Remedial Action Documentation: |
| Stormwater BMPs and Treatment Structures: Visually inspect all stormwater BMPs and treatment structures devices, discharge areas infiltration and outfalls shown on the Site Map. <ul style="list-style-type: none"> • Are BMPs and treatment structures in good repair and operational? • Are BMPs and treatment structures free from debris buildup that may impair function? • The permit requires Permittees to clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe. Based on this, do catch basins need to be cleaned? • Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition? | Yes | No | NA | Findings and Remedial Action Documentation: |
| Observation of Stormwater Discharges: <ul style="list-style-type: none"> • Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? • Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater and is not allowed to comeingle with stormwater or enter storm drains. Is process water comingling with stormwater or entering storm drains? • Illicit discharges include domestic wastewater, noncontact cooling water, or process wastewater (including leachate). Were any illicit discharges observed during the inspection? | Yes | No | NA | Findings and Remedial Action Documentation: |

II. CORRECTIVE ACTION AND SWPPP MODIFICATIONS DESCRIPTIONS: Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs.

III. CERTIFICATION STATEMENTS AND SIGNATURES:

Inspector - Certification: This section must be completed by the person who conducted the site inspection prior to submitting this form to the person with signature authority (see Permit Condition G2) or a duly authorized representative of that person.

- ☐ The facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit.
- ☐ The facility is out of compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

| | | | |
|-----------------------------------|------------------------------|--------------------------|-------------|
| | | | |
| Inspector's Name – Printed | Inspector's Signature | Inspector's Title | Date |

Permittee – Certification:

- ☐ The facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit.
- ☐ The facility is out of compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

| | | |
|--|---|-------------|
| | | |
| PRINTED NAME of person with Signature Authority (permit condition G2.A) or a Duly Authorized Representative ¹ | SIGNATURE of person with Signature Authority (permit condition G2.A) or a Duly Authorized Representative ¹ | DATE |

¹A person is duly authorized representative only if 1) the authorization is made in writing by a person described in Permit Condition G2.A and submitted to Ecology, and 2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.



Industrial Stormwater General Permit Annual Report Form

Permit No. WAR-_____

Site Name: _____

Site County: _____

Use this form to submit your annual report to Ecology. This form is not protected. Use your F11 key to maneuver through the fields. Attach corrective action documentation, and/or additional sheets if necessary. All facilities must submit a signed annual report each year on or before May 15th. Retain a copy of your submitted report onsite for Ecology review.

1. Benchmarks Exceeded

This report is based on samples collected during calendar year 20____.

Did you exceed the benchmark for any parameter during the above noted calendar year (Jan 1st – Dec 31st)?

Note: If you sampled a parameter (other than pH or visible oil sheen) at a discharge point more than once during a quarter, the average of the sample results must be compared to the benchmark.

Yes ☐ - **Complete Sections 2 and 3 and sign and submit the form as described in Section 4.**

No ☐ - **Complete Section 2, skip Section 3, and sign and submit the form as described in Section 4.**

Include any additional comments here:

2. Stormwater Problems Identified At the Facility

Instructions: Based on the best available information, briefly describe any potential or actual stormwater pollution problem(s) you identified during the previous calendar year (Jan 1st – Dec 31st).

- Sources of available information may include (but may not be limited to): SWPPP reviews, audits made by consultants or providers of technical assistance, inspection reports or other notification made by federal/state/local authorities, visual observations, and/or your facility's monthly site inspections (self-inspections).
- For each problem identified, provide the date you discovered the problem (estimate if necessary).
- Do not include problems discovered through stormwater sampling. This information is covered in Section 3.

| Date Problem Discovered: | Describe the Problem: |
|--------------------------|-----------------------|
| | |
| | |
| | |
| | |

3. Corrective Actions Planned or Taken

Instructions: Complete this section for each pollutant parameter (e.g., turbidity, copper) that exceeded a benchmark during the previous calendar year (Jan 1st – Dec 31st). The permit requires you to identify the condition triggering the need for corrective action review. To do this, indicate below which quarters had a sample result that exceeded the benchmark. If more than one sample was taken at a sample location, indicate which quarters had an average sample result that exceeded the benchmark. Note: If you exceeded the benchmark for more than one parameter (e.g., turbidity and zinc), make additional copies of Section 3 and complete one for each parameter.

Pollutant Parameter: _____ benchmark was exceeded during the following quarters (check all that apply):

- ☐ 1st Quarter (January, February, March)
☐ 2nd Quarter (April, May, June)
☐ 3rd Quarter (July, August, September)
☐ 4th Quarter (October, November, December)

Instructions: For the pollutant parameter above, summarize any Level 1, 2, or 3 corrective actions completed during the previous calendar year and include the dates you completed the corrective actions.

☐ Level 1 corrective action

Describe the additional *operational source control* BMPs you implemented (Permit Condition S8.B):

Date corrective action was completed:

☐ Level 2 corrective action

Describe the additional *structural source control* BMPs you implemented (Permit Condition S8.C):

Date corrective action was completed:

☐ Level 3 corrective action

Describe the additional *treatment* BMPs you implemented (Permit Condition S8.D):

Date corrective action was completed:

Instructions: For the pollutant parameter listed above, describe the status of any Level 2 or 3 corrective actions triggered during the previous calendar year, but have not yet been completed. Identify the date you expect to complete corrective actions.

☐ Level 2 corrective action

Describe the status of the corrective action:

Date you expect to complete corrective action:

☐ Level 3 Corrective Action

Describe the status of the corrective action:

Date you expect to complete corrective action:

4. Certification by Permittee

"I certify under penalty of law that this document and all attachments were prepared under my direction, or supervision, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Printed Name

Company

Date

Signature*

***Note:** Signature not required if the form is submitted electronically through the Water Quality Permitting Portal

***Federal regulations require this report to be signed by the following person, or a duly authorized representative:**

- A. In the case of corporations, by a responsible corporate officer.

Note: Responsible Corporate Officer is defined on p.59 of ISGP:

<http://www.ecy.wa.gov/programs/wq/stormwater/industrial/ISGPFinal2015.pdf>

- B. In the case of a partnership, by a general partner of a partnership.

- C. In the case of sole proprietorship, by the proprietor.

- D. In the case of a municipality, state, federal, or other public facility: by either a principal executive officer or ranking elected official.

A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

Please upload the completed form to the Water Quality Permitting Portal:

<http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html>. Make sure you retain a copy for your records.

- Click on "Permit Submittals"
- Then, click on "My Permits", and
- Then, click on "Submittals".

If you have any issues or questions, please contact Ecology's IT support staff at WQWebPortal@ecy.wa.gov or call 800-633-6193/Option 3

If you have questions about this form, contact the following Ecology staff:

| Location | Contact Name | Phone | E-mail |
|--|---------------|--------------|--|
| City of Seattle, and Kitsap, Pierce, and Thurston counties | Josh Klimek | 360-407-7451 | josh.klimek@ecy.wa.gov |
| Island, King, and San Juan counties | Clay Keown | 360-407-6048 | clay.keown@ecy.wa.gov |
| Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Skagit, Snohomish, Spokane, Stevens, Walla, Whatcom, and Whitman counties. | Shawn Hopkins | 360-407-6442 | shawn.hopkins@ecy.wa.gov |
| Benton, Chelan, Clallam, Clark, Cowlitz, Douglas, Grays Harbor, Jefferson, Kittitas, Klickitat, Lewis, Mason, Okanogan, Pacific, Skamania, Wahkiakum, and Yakima counties. | Joyce Smith | 360-407-6858 | joyce.smith@ecy.wa.gov |

To request materials in a format for the visually impaired, call the Water Quality Program at Ecology, 360-407-6600, Relay Service 711, or TTY 877-833-6341.

Form 5. Employee Training Documentation

| Date of Training | Attendees | | Training Topic(s) Covered ¹ and Brief Description of Training Program/Materials (e.g., film, newsletter course) |
|------------------|---------------------|-----------|---|
| | Name (Please Print) | Signature | |
| | | | -Why ACW is covered under NPDES. -Stormwater Pollution Prevention Plan and SWPPP maps -Employee responsibilities under the SWPPP -Best management practices -Spill prevention and response -Treatment system maintenance |
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| Date of Training | Attendees | | Training Topic(s) Covered ¹ and Brief Description of Training Program/Materials (e.g., film, newsletter course) |
|------------------|---------------------|-----------|---|
| | Name (Please Print) | Signature | |
| | | | -Why ACW is covered under NPDES. -Stormwater Pollution Prevention Plan and SWPPP maps -Employee responsibilities under the SWPPP -Best management practices -Spill prevention and response -Treatment system maintenance |
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Adapted from Ecology Worksheet # available online at: <http://www.ecy.wa.gov/biblio/0410030.html>. Form template last updated: 12/2018.

¹ See Section 3.1.5 of the SWPPP for a list of topics that should be covered during employee training.

Alaskan Copper Works Facility Spill Log

| Date | Spill | Leak | Location | Description | | | Cleanup/Preventive Measures Taken |
|------|-------|------|----------|------------------|----------|------------------|-----------------------------------|
| | | | | Type of Material | Quantity | Source, If Known | |
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Adapted from Ecology Worksheet #4 available online at: <http://www.ecy.wa.gov/biblio/0410030.html>. Log template last updated: 12/2008.

a. Include quantity of material recovered

APPENDIX D. COMPLETED SWPPP FORMS

Completed forms are not included in digital copy of SWPPP. Individual digital file folders are kept along with hard copies within the SWPPP binder. Completed SWPPP forms are available upon request.

SWPPP Certifications

Monthly Inspections

Maintenance Records

DMRs

Training Records

Spill Logs

AKC-0021978



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

June 20, 2018

Carl Vinke
Alaskan Copper Works
3405 6th Ave S
Seattle, WA, 98124

Re: Stormwater Treatment System Design Engineering Report Approval – Alaskan Copper Works at 3405 6th Ave S, Seattle, WA

Dear Mr. Vinke,

The Washington State Department of Ecology (Ecology) received your company's Stormwater Treatment Engineering Report (Report) that Catchment Solutions LLC submitted which described using pH adjustment and media filtration as the treatment system to comply with Level 3 Corrective Action requirements in the Industrial Stormwater General Permit (ISGP), Permit # WAR- 000139. The initial report was received by Ecology's Northwest Regional Office (NWRO) on May 14, 2018. The report has been reviewed by Bo Li, P.E., at Ecology's NWRO.

In accordance with RCW 90.48.110 and Chapter 173-240 WAC, the subject document is hereby APPROVED as meeting the intent of an Engineering Report and meeting the goal of achieving the applicable benchmark values of the Industrial Stormwater General Permit (ISGP).

This office is to be notified immediately of any proposed changes or revisions to the approved document. Any such changes or revisions must be issued in the form of addenda, technical appendices, or supplemental reports to the original approved documents and must be approved in writing by Ecology.

Ecology's review and approval of this document is to assure compliance and consistency with the appropriate rules, regulations, guidelines, planning and design criteria, and/or other similar documents. Ecology's review shall not be construed as a quality control check or as approval with respect to the completeness, accuracy, or adequacy of this document.

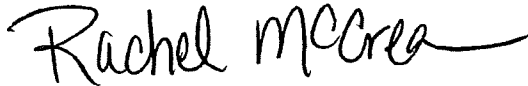
This approval does not relieve the owner(s) of the proposed facilities from any other approvals as may be required by other governmental reviewing agencies. In addition, this approval does not relieve the owner or owner's engineer from the responsibilities and liabilities that result from noncompliance with water pollution laws and regulations during the design, construction, or



operation of the proposed facilities. Also, this approval does not relieve the owner or the owner's engineer from the responsibilities for the technical adequacy and/or accuracy of the contents of this document.

If you have any questions or need any additional information, please do not hesitate to contact Bo Li, P.E. at bo.li@ecy.wa.gov, or call her at (425) 649-7284; or Alex White at alex.white@ecy.wa.gov, or call him at (425) 649- 7263.

Sincerely,

A handwritten signature in black ink that reads "Rachel McCrea". The signature is fluid and cursive, with a long horizontal stroke extending from the end of the name.

Rachel McCrea
Water Quality Section Manager
Northwest Regional Office

cc: Central File: WQ 9.5, Alaskan Copper Works, WAR-000139
Bo Li, NWRO, Ecology